

Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 1 of 37



Titl: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 2 of 37

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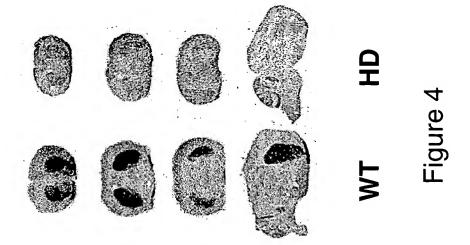
Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Pag 3 of 37

1	TGTATGGGAA	TAGTGTTTCC	ATATGATCTG	TTGTCTGGAG	TATATGCTAC	ATGTTCATTT
	ACATACCCTT	ATCACAAAGG		AACAGACCTC		TACAAGTAAA

	ACATACCCTT	AICACAAAGG	TATACTAGAC	AACAGACCTC	ATATACGATG	TACAAGTAAA
				H01		
61	ACTGTACAAA	AACCCAGTGC	AGCTGATGAT	GCAAAGCAGT	CTCTCTCTGT	GTACAGTGCC
	TGACATGTTT	TTGGGTCACG	TCGACTACTA	CGTTTCGTCA	GAGAGAGACA	CATGTCACGG
121	CCACCTATTT	AAAAATCACG	TACAASCCCA	GAACACTGTG	AAACACTTAA	CATAAGAAAC
	GGTGGATAAA	TTTTTAGTGC	ATGTTSGGGT	CTTGTGACAC	TTTGTGAATT	GTATTCTTTG
					HD2	
181	AAACGCAGCG	TCTGGATTCT	TTCCAAGGAG	AGCAGCTTTC	TCCACAGGAA	CACAGTAACA
	TTTGCGTCGC	AGACCTAAGA	AAGGTTCCTC	TCGTCGAAAG	AGGTGTCCTT	GTGTCATTGT
	HD2					
241	AAAGAGGTCC	GCCGCCATCC	ACACCCAGCC	AAGACACCTC	AGAGGCCATA	GGGACAACCT
	TTTCTCCAGG	CGGCGGTAGG	TGTGGGTCGG	TTCTGTGGAG	TCTCCGGTAT	CCCTGTTGGA
301	CCTTGCTGGC	CAACACCTGC	TGGAGCAGGG	CACAGGTCCC	AGCAACTGAT	CCTCAGTGGA
	GGAACGACCG	GTTGTGGACG	ACCTCGTCCC	GTGTCCAGGG	TCGTTGACTA	GGAGTCACCT
361	TGGGTCCGCA	GTCAAAGCCT	TAATGGGCTC	TCTTTTGAAG	GGGAAAGAAA	KWTTTCAAGC
	ACCCAGGCGT	CAGTTTCGGA	ATTACCCGAG	AGAAAACTTC	CCCTTTCTTT	MWAAAGTTCG
421	TTATGATATC	CAACATTATT	ATAGTTGATG	AGTTAGTAAA	TTCCGAAAAA	AAAA
	AATACTATAG	GTTGTAATAA	TATCAACTAC	TCAATCATTT	AAGGCTTTTT	TTTT



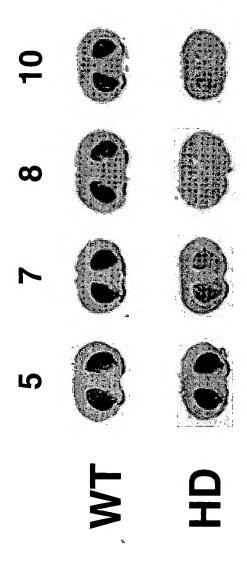
Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, t al. Application No.: 10/659,770 Dock t No.: 2817/102 Page 4 of 37



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Title: G ne Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Pag 5 of 37





Title: Gene Nec ssary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 6 of 37

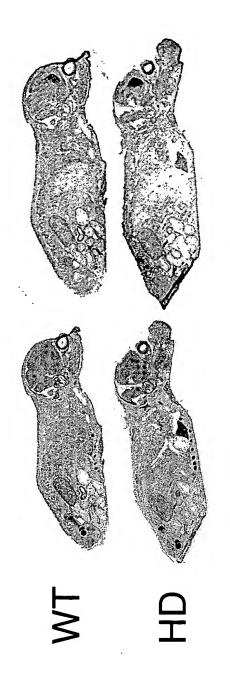
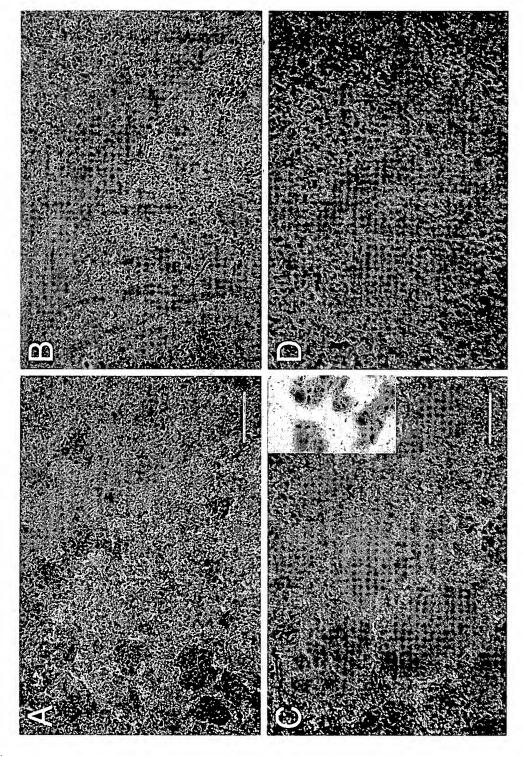


Figure 6

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Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 7 of 37





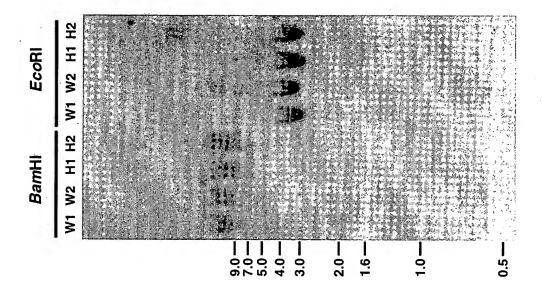
Titl: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 8 of 37







Titt: Gene Necessary for Striatal Function... Inv ntor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 9 of 37



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Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770

Application No.: 10/659,
Docket No.: 2817/102
Page 10 of 37
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4						
1	CACTGAAGCT	GGTCCACGTC	TATAAACAGG	TGACACTGGC	TGCAGCAAAA	AGCCATTCGA
	GTGACTTCGA	CCAGGTGCAG	ATATTTGTCC	ACTGTGACCG	ACGTCGTTTT	TCGGTAAGCT
61	TCCACACAAA	TTGATCTTCT	ATCATCTTGG	AATCTGAATT	GCAGGGAGGA	GCAGTATGTA
	AGGTGTGTTT	AACTAGAAGA	TAGTAGAACC	TTAGACTTAA	CGTCCCTCCT	CGTCATACAT
121	AGACGACCGT	TTAATTCAGG	CATTCCGAAG	GCATGAGCGC	ATGGATTCTG	TCACCAAGCG
	TCTGCTGGCA	AATTAAGTCC	GTAAGGCTTC	CGTACTCGCG	TACCTAAGAC	AGTGGTTCGC
. 181	TATAAAAGGA	CCCTGGCATT	GGGAAACCTA	TGACGGACTG	TTTTTGCTGT	AGAAGTAGGG
	ATATTTTCCT	GGGACCGTAA	CCCTTTGGAT	ACTGCCTGAC	AAAAACGACA	TCTTCATCCC
241	ATTTTACAGA	AGTCTCCTTG	AATTTGCCCT	GCCTGGGGCA	GTTTTGCAGA	GGAACCTGCC
	TAAAATGTCT	TCAGAGGAAC	TTAAACGGGA	CGGACCCCGT	CAAAACGTCT	CCTTGGACGG
301	AGAGATTTAT	TGGCTGGTCA	GTCTCTTGTG	AAATAGTATC	ATGTGAGAAA	CAGTTTGTAG
	TCTCTAAATA	ACCGACCAGT	CAGAGAACAC	TTTATCATAG	TACACTCTTT	GTCAAACATC
361	АААААААСТА	TACCTGGGAA	GACCTTTGCA	ACATTGTTCC	TTCCATGGGC	CAAGACTCAG
		ATGGACCCTT				
421	TTAGGAGGCA	TAAATCTGCC	CGGAATAAAC	TAGGCCAGGA	TACAGCCATG	TTTAGTTAAT
	AATCCTCCGT	ATTTAGACGG	GCCTTATTTG	ATCCGGTCCT	ATGTCGGTAC	AAATCAATTA
481	AATTTGGTTT	TAGAATTCAC	ACAGGCAGGA	TTGGTTTTTT	TGTGTCTTGG	CAAGTGGAGC
		ATCTTAAGTG				
541	ATATTTAACA	TACAGGCATG	GGAATCCTGC	CTCTTAGCTT	TTCCCACCCT	CTTGTCTCAC
	TATAAATTGT	ATGTCCGTAC	CCTTAGGACG	GAGAATCGAA	AAGGGTGGGA	GAACAGAGTG
601	CAAGTTTTTT	CTCTCCAAAG	GTTTCCAGGA	ATTTCTCATT	AATGGCTGAT	GCAAACTTAG
	GTTCAAAAAA	GAGAGGTTTC	CAAAGGTCCT	TAAAGAGTAA	TTACCGACTA	CGTTTGAATC
661	TGAATAATAA	TGAATATAAA	CAATGCTCAC	CTCACCAAAA	TTATATTATT	TGCAGTCATT
	ACTTATTATT	ACTTATATTT	GTTACGAGTG	GAGTGGTTTT	AATATAATAA	ACGTCAGTAA
721	TGTGATAACA	CAAATTTTAT	CGCAATGGTT	ATTATTTAAT	TTGTGGCCAC	ACACTGTGGT
	ACACTATTGT	GTTTAAAATA	GCGTTACCAA	TAATAAATTA	AACACCGGTG	TGTGACACCA
781	TATCTTTTGT	TGTGGTTGTT	TCTGAGAAAA	TGTTCTTGGA	TATGTAAGTG	CCAATACCAG
,	ATAGAAAACA	ACACCAACAA	AGACTCTTTT	ACAAGAACCT	ATACATTCAC	GGTTATGGTC
841	TGTGAAGTAT	TGATCCCGGG	CAGCAAAATA	CAGCCTAAGG	TTTGTAAACA	TCAATTCTAT
	ACACTTCATA	ACTAGGGCCC	GTCGTTTTAT	GTCGGATTCC	AAACATTTGT	AGTTAAGATA
901	CTCAGTTCAT	CAGAGGGCCT	GAGAAGCTGC	GGGGCAGTGT	AAAGTAAAGT	ATGCTGGGCT
	GAGTCAAGTA	GTCTCCCGGA	CTCTTCGACG	CCCCGTCACA	TTTCATTTCA	TACGACCCGA
961	GGTGGTGGTC	AGCCTCCCGC	CTGAAGAGTG	ACCAGTGCTG	GCCCGACGGA	TCGCTGAGAT
	CCACCACCAG	TCGGAGGGCG	GACTTCTCAC	TGGTCACGAC	CGGGCTGCCT	AGCGACTCTA
1021		AATGGCAAAA				
	TAAGAGGGTA	TTACCGTTTT	TTTATCCGTC	AAACTACACT	GGACAAATCA	CACCGAGAGG
1081	TCTTTTGAGC	ATGTGTTAGC	ATTTTTTTT	TATACTCATC	CAGTGAACTC	TGCTCTTCCA
	AGAAAACTCG	TACACAATCG	TAAAAATAAA	ATATGAGTAG	GTCACTTGAG	ACGAGAAGGT
1141	AGTGTGTTCA	TGTATGTGCT	AGATATATTA	GCACAGCCTG	CCTTCTGCTG	CACAACGCCT
		ACATACACGA				
1201	TAGAGACCCG	GCCTTTCAAT	GAGCTTAGCT	TGTGCTCTGT	TTCTGCTCTC	TTAGGTCTAA
		CGGAAAGTTA				
						



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Pag 11 of 37

1261						GAGCCTTTTC
	·····					CTCGGAAAAG
1321	GTTTTCAATG	CTGACTTCTC	CCCTTTCTCT	CCTGTGCTCA	CCTTACCTTT	CCAGAGTGTA
	CAAAAGTTAC	GACTGAAGAG	GGGAAAGAGA	GGACACGAGT	GGAATGGAAA	GGTCTCACAT
1381	AGGGACAACT	TTTAAGGAGG	CGTGTCCCTG	GTAGGGGCAT	CCCTGTTCAC	CAGGTGCCTG
	TCCCTGTTGA	AAATTCCTCC	GCACAGGGAC	CATCCCCGTA	GGGACAAGTG	GTCCACGGAC
1441	TCATCACCCC	ACTTGACTGA	CATCTACCCT	GGTGACTATG	GGTTCCTCTT	GTTTGTAGGG
	AGTAGTGGGG	TGAACTGACT	GTAGATGGGA	CCACTGATAC	CCAAGGAGAA	CAAACATCCC
1501	AACGGTGGCT	CCAGGTGGAG	GCATCAATCT	GTTGGGTTCT	GGTTCCCGGC	TGCCTTTGGT
	TTGCCACCGA	GGTCCACCTC	CGTAGTTAGA	CAACCCAAGA	CCAAGGGCCG	ACGGAAACCA
1561	TTTGAAAGTC	TCTTCTCTGT	ATATTCCTAC	CCTGCATTTG	CTTTGTGTGG	TGCTGATGCT
•	AAACTTTCAG	AGAAGAGACA	TATAAGGATG	GGACGTAAAC	GAAACACACC	ACGACTACGA
1621	GTGCGCAGTA	GGATTCTTGG	ATGACTCTCC	ATCAGTCACA	GACTCCCCCT	GTTGCAAAGT
	CACGCGTCAT	CCTAAGAACC	TACTGAGAGG	TAGTCAGTGT	CTGAGGGGGA	CAACGTTTCA
1681	GTCAGGCTGA	CTCGACAGTC	ACCGTAAAAT	CTGAGTCAGT	CACACACAGG	CTGTCAGCCA
	CAGTCCGACT	GAGCTGTCAG	TGGCATTTTA	GACTCAGTCA	GTGTGTGTCC	GACAGTCGGT
1741	CGGCTTCCAC	TTGCATGGCT	ATTCTATTTT	CACACGTGAG	TTTCTGTTGC	TGGCTGGCTG
	GCCGAAGGTG	AACGTACCGA	TAAGATAAAA	GTGTGCACTC	AAAGACAACG	ACCGACCGAC
1801	ACTGGCATTA	TCTATGCTAA	GTTGAAATCA	GGAGTGCCCA	GCAGAGCCCA	TCATTCTCAC
	TGACCGTAAT	AGATACGATT	CAACTTTAGT	CCTCACGGGT	CGTCTCGGGT	AGTAAGAGTG
1861	TGTCTTTGAA	ACAAAGCTGT	ACGGTTTGAT	CGATGAACGT	ATTTAAAGCA	TTTCATGCAA
	ACAGAAACTT	TGTTTCGACA	TGCCAAACTA	GCTACTTGCA	TAAATTTCGT	AAAGTACGTT
1921	TGACAAAGTG	CTCAGTAGTG	GAAGGCAGGC	TGTGACCAGT	CTGCCTGCTC	СТТАСТАТАА
	ACTGTTTCAC	GAGTCATCAC	CTTCCGTCCG	ACACTGGTCA	GACGGACGAG	GAATGATATT
1981	TTGTGAGGAT	TTGTTACTGG	AACAGTACAT	GGAGGCCTGA	CCTTGTGGGG	GCACAGGGTG
	AACACTCCTA	AACAATGACC	TTGTCATGTA	CCTCCGGACT	GGAACACCCC	CGTGTCCCAC
2041	GAACCTTAGC	TGAATATAGT	GTGTGTCTCA	AGAGGAAGTC	AGGGTACTAG	CTCAGTGCTC
	CTTGGAATCG	ACTTATATCA	CACACAGAGT	TCTCCTTCAG	TCCCATGATC	GAGTCACGAG
2101	AATCTCCAGG	TACTATATAT	ACATTTGCCC	GTTTTATCTC	TAATGTGAAA	TAAATCCCCA
	TTAGAGGTCC	ATGATATATA	TGTAAACGGG	CAAAATAGAG	ATTACACTTT	ATTTAGGGGT
2161	AACACTTGTT	TATCGTGTAG	CGTACCTAAA	AGACTATTCT	ATTATGGGTG	TCCCCACTTT
	TTGTGAACAA	ATAGCACATC	GCATGGATTT	TCTGATAAGA	TAATACCCAC	AGGGGTGAAA
2221	CTTGGTTTGG	TCACCCCGAT	CCCCCGGTCT	TCTGCTGTAT	CTAGAACAGT	GACTATAAAT
	GAACCAAACC	AGTGGGGCTA	GGGGGCCAGA	AGACGACATA	GATCTTGTCA	CTGATATTTA
2281	GATGTATGGG	AATAGTGTTT	CCATATGATC	TGTTGTCTGG	AGTATATGCT	ACATGTTCAA
	CTACATACCC	TTATCACAAA	GGTATACTAG	ACAACAGACC	TCATATACGA	TGTACAAGTT
2341	TTACTGTACA	AAAACCCAGT	GCAGCTGATG	ATGCAAAGCA	GTCTCTCTCT	GTGTACAGTG
	AATGACATGT	TTTTGGGTCA	CGTCGACTAC	TACGTTTCGT	CAGAGAGAGA	CACATGTCAC
2401	CCCCACCTAT	TTAAAAATCA	CGTACAASCC	CAGAACACTG	TGAAACACTT	AACATAAGAA
	GGGGTGGATA	AATTTTTAGT	GCATGTTSGG	GTCTTGTGAC	ACTTTGTGAA	TTGTATTCTT
2461	CAAACGCAGC	GTCTGGATTC	TTTCCAAGGA	GAGCAGCTTT	CTCCACAGGA	ACACAGTAAC
		CAGACCTAAG				
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Title: Gen Necessary for Striatal Function.... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 12 of 37

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	2521	AAAAGAGGTC	CGCCGCCATC	CACACCCAGC	CAAGACACCT	CAGAGGCCAT	AGGGACAACC
		TTTTCTCCAG	GCGGCGGTAG	GTGTGGGTCG	GTTCTGTGGA	GTCTCCGGTA	TCCCTGTTGG
	2581	TCCTTGCTGG	CCAACACCTG	CTGGAGCAGG	GGCACAGGTC	CCAGCAACTG	ATCCTCAGTG
		AGGAACGACC	GGTTGTGGAC	GACCTCGTCC	CCGTGTCCAG	GGTCGTTGAC	TAGGAGTCAC
	2641	GATGGGTCCG	CAGTCAAAGC	CTTAATGGGC	TCTCTTTTGA	AGGGGAAAGA	AAGAATTTCA
		CTACCCAGGC	GTCAGTTTCG	GAATTACCCG	AGAGAAAACT	TCCCCTTTCT	TTCTTAAAGT
	2701	AGCTTATGAT	ATCCAACATT	ATTATAGTTG	ATGAGTTAGT	AAATTCCAAA	AAAAAAAGAT
		TCGAATACTA	TAGGTTGTAA	TAATATCAAC	TACTCAATCA	TTTAAGGTTT	TTTTTTTCTA
	2761	GATTTTATAT	GTATGACATA	AAAAAAATCT	TTGTAAAGTG	CGCAAGTGCA	ATAATTTAAA
		СТААААТАТА	CATACTGTAT	TTTTTTTAGA	AACATTTCAC	GCGTTCACGT	TATTAAATTT
	2821	GAGGTCTTAT	CTTTGCATTT	ATAAATTATA	AATATTGTAC	ATGTGTGTAA	TTTTTCATGT
		CTCCAGAATA	GAAACGTAAA	TATTTAATAT	TTATAACATG	TACACACATT	AAAAAGTACA
	2881	ATTCATTTGC	AGTCTTTGTA	TTTAAAAAAA	CTTTACTGTT	ATGTTTGTAT	AATAGAACAT
		TAAGTAAACG	TCAGAAACAT	AAATTTTTTT	GAAATGACAA	TACAAACATA	TTATCTTGTA
	2941	TAATCATTTA	TTATAACTCA	GACAAGGTGT	AAATAAATTC	ATAATTCAAA	CAGCCAGTAT
		ATTAGTAAAT	AATATTGAGT	CTGTTCCACA	TTTATTTAAG	TATTAAGTTT	GTCGGTCATA
	3001	ATATGCATAT	ATGGGTGTTA	CATTGCAAAA	ATCTCTATCT	TTGTTCTATT	CACATGCTTA
		TATACGTATA	TACCCACAAT	GTAACGTTTT	TAGAGATAGA	AACAAGATAA	GTGTACGAAT
	3061	AAGAAGTAAG	AAATCTTTTG	TGGATATGTA	ATTATACATA	TAAAGTATAT	ATATATGTAT
		TTCTTCATTC	TTTAGAAAAC	ACCTATACAT	TAATATGTAT	ATTTCATATA	TATATACATA
	3121	GATACATGAA	ATATATTTAG	AAATGTTCAT	AATTTTAATG	GATATTCTTT	GGTGTGAATA
**********		CTATGTACTT	TATATAAATC	TTTACAAGTA	TTAAAATTAC	CTATAAGAAA	CCACACTTAT
	3181	ATTGAATACA	ACATTTTTAA	AATGAAAAA	AAAAAAAAA	AAAAAAAAA	ААААА
		TAACTTATGT	TGTAAAAATT	TTACTTTTTT	TTTTTTTTT	TTTTTTTTT	TTTTTT



Title: Gene Necessary for Striatal Function... Inventor(s): Rob rtson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 13 of 37



Figure 11 3236 bp



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Figure 12

Title: G ne Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 14 of 37

			-			
		•				
AAGTGTAAAT	ААААТАААСА	TCTAATAAAA	AAAATTACAT	ACCATAGAGG	AACAAGATAA	
TTCACATTTA	TTTTATTTGT	AGATTATTT	TTTTAATGTA	TGGTATCTCC	TTGTTCTATT	
TTTCTGCCCA	ACTTCATACC	CTCCAGCGTA	TAGTGTTGAG	GTTTGGTCTG	TTGCTGTGTA	

_	MOIGIMANI	DUUUU I UUU CU	ICIMINANA	DUVUUTIUCUI	ACCATAGAGG	MACAAGAIAA
	TTCACATTTA	TTTTATTTGT	AGATTATTTT	TTTTAATGTA	TGGTATCTCC	TTGTTCTATT
61	TTTCTGCCCA	ACTTCATACC	CTCCAGCGTA	TAGTGTTGAG	GTTTGGTCTG	TTGCTGTGTA
		TGAAGTATGG				
121	TTGTAATGTA	ATGTTAAATT	CTCTACCTGA	AGGTCTAGGC	CTACAAGTGA	ATTCTCATGT
		TACAATTTAA				
181	TTATAGAGTT	TTGTTGTGCA	AACCTTGTTC	CTTAATTTAA	AACTATGGTT	AAAAAACAAA
	AATATCTCAA	AACAACACGT	TTGGAACAAG	GAATTAAATT	TTGATACCAA	TTTTTTGTTT
241	ACAAAACTGG	CTACAGCCAA	TAACTGAAGG	GGGTTACCTT	GTTGAAGGGG	TGGAAAAGAG
	TGTTTTGACC	GATGTCGGTT	ATTGACTTCC	CCCAATGGAA	CAACTTCCCC	ACCTTTTCTC
301	AGAGGAGGAA	GAAGGGAGTT	CAAGAGAAGG	AGAAGAACAA	GAGGAGAGGA	GGAAGCTGCC
	TCTCCTCCTT	CTTCCCTCAA	GTTCTCTTCC	TCTTCTTGTT	CTCCTCTCCT	CCTTCGACGG
361	ACGAGGGGAG	ATGGGCCATG	AGAACTTGGC	CAGGAGAAAT	AGCCAGTATC	TGGAGTACAC
		TACCCGGTAC				
421	CACTGAGGAG	GTAGCCAGGC	TAGCAGTTAG	AAGAGTAGAT	TAGGGGTTAT	TTTTCCCCCA
	GTGACTCCTC	CATCGGTCCG	ATCGTCAATC	TTCTCATCTA	ATCCCCAATA	AAAAGGGGGT
481	CTCCACATAG	TTATCAAAGC	CAAATAAAAT	AACCATAGTC	TGAGTCTCAT	CTATTGTAA
	GAGGTGTATC	AATAGTTTCG	GTTTATTTTA	TTGGTATCAG	ACTCAGAGTA	GATAAACATT
541	GCTAGTTGGG	TATAAGATTA	ATTTGGCTGT	ACTACAGTTT	AGATTTCTAA	CATAGGAACT
	CGATCAACCC	ATATTCTAAT	TAAACCGACA	TGATGTCAAA	TCTAAAGATT	GTATCCTTGA
601	ATCAAAAACT	TGCTCAAACA	AGAACATGCT	GACAATATTT	TAAAATGATT	ATTTATATTG
	TAGTTTTTGA	ACGAGTTTGT	TCTTGTACGA	CTGTTATAAA	ATTTTACTAA	TAAATATAAC
661	TTTGCACTTT	CTAAAGTTTC	TTCTAAATGT	TCCATGGTCA	AATTAAAAAA	TATACATATT
	AAACGTGAAA	GATTTCAAAG	AAGATTTACA	AGGTACCAGT	TTAATTTTTT	ATATGTATAA
721	GGCTATTAAA	TTCGTCTAAG	TGGGGCTGGA	GAGATAGCTC	AGAGGTTAAG	AGCACTGACT
	CCGATAATTT	AAGCAGATTC	ACCCCGACCT	CTCTATCGAG	TCTCCAATTC	TCGTGACTGA
781	GCTCTTCCAG	AGGTCCTGAG	TTCAATTCCC	AGCGACCACA	TGGTGGCTCA	CAGCCATCTG
	CGAGAAGGTC	TCCAGGACTC	AAGTTAAGGG	TCGCTGGTGT	ACCACCGAGT	GTCGGTAGAC
841	TAATAGATAG	GATCTGACGC	CCTCTTCTGG	AGTGTCTGAA	GACAGCTACA	ATGTACTCAT
	ATTATCTATC	CTAGACTGCG	GGAGAAGACC	TCACAGACTT	CTGTCGATGT	TACATGAGTA
901	ATATATTAAA	TAAATAATAT	TAGAAAATTC	TTCTAAGTGT	ATCATTTATA	GAATATTTAA
	TATATAATTT	ATTTATTATA	ATCTTTTAAG	AAGATTCACA	TAGTAAATAT	CTTATAAATT
961	TATATAAAGT	AAATGCCTCA	GGAAATATAA	ACTTGGAATT	AAATCAAAGA	ACTTCATGAG
	ATATATTTCA	TTTACGGAGT	CCTTTATATT	TGAACCTTAA	TTTAGTTTCT	TGAAGTACTC
1021	TAGTGGGCCA	CAAAAAATGT	GTACCAGGGG	AAGACCGGAG	GGAGGGGAGA	AGGAAGGGAT
	ATCACCCGGT	GTTTTTTACA	CATGGTCCCC	TTCTGGCCTC	CCTCCCTCT	TCCTTCCCTA
1081	GGAGATAGAA	TTTTGCCTCT	GCATTCCTTG	GGCTGGCACA	GGTATAATGC	TGTGGGAATT
	CCTCTATCTT	AAAACGGAGA	CGTAAGGAAC	CCGACCGTGT	CCATATTACG	ACACCCTTAA
1141	GGGAAACTAC	AAGGAAGCTG	CAAAGCTGGG	CGGAACTCGT	TTCCGCAAGC	TGGGCTCATC
	CCCTTTGATG	TTCCTTCGAC	GTTTCGACCC	GCCTTGAGCA	AAGGCGTTCG	ACCCGAGTAG
1201	TAAGTGTCCA	TGCATGGCTG	CCACACTGCA	GTGAACTTTA	AAACATTTGT	GTTCCAGAGA
		ACGTACCGAC				



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Pag 15 of 37

1261	TGTAGAGATG	CTCACAATAG	TACAAAGGCG	GGAGGGAGGT	ATTTCCAGAC	TAAGAGGAAG
	ACATCTCTAC	GAGTGTTATC	ATGTTTCCGC	CCTCCCTCCA	TAAAGGTCTG	ATTCTCCTTC
1321	AAAAACCATT	GCTGATTAAA	CATCTGCATA	TGAGCGCCCC	CACCTCCATA	CACACACACA
	TTTTTGGTAA	CGACTAATTT	GTAGACGTAT	ACTCGCGGGG	GTGGAGGTAT	GTGTGTGTGT
1381	CACACACACA	CACACACACA	CAACCAAACA	GAACAAATAC	ACATGCATGT	CTACAGCCTG
	GTGTGTGTGT	GTGTGTGTGT	GTTGGTTTGT	CTTGTTTATG	TGTACGTACA	GATGTCGGAC
1441	CAGGAACAAA	ATGGTATGTC	TGTGAGGAAC	CAGGAGATGC	ACAGGTCCTA	ACCTCTGTCT
	GTCCTTGTTT	TACCATACAG	ACACTCCTTG	GTCCTCTACG	TGTCCAGGAT	TGGAGACAGA
1501	CCTACAAGCC	CTGAAGTCTG	GTCAGGGTCA	AATGTACAAA	AGCAGGCTAA	GGAAGCTGTT
	GGATGTTCGG	GACTTCAGAC	CAGTCCCAGT	TTACATGTTT	TCGTCCGATT	CCTTCGACAA
1561						TTGGAGAGTG
=	ATCACTTTCT	AAAAAAAGAA	GTTGAGATCC	TTGTTGGATA	AAGGATCCTA	AACCTCTCAC
1621	CTCAGGAGGA	AACATTCAGA	CAACTGATGC	TCTCTGTGTA	CCCCAGATTC	AGGTATTGGG
	GAGTCCTCCT	TTGTAAGTCT	GTTGACTACG	AGAGACACAT	GGGGTCTAAG	TCCATAACCC
1681	GTAGTTAGTT	GTGCTCATGT	ATGTGCTAGA	TATATTAGCA	CAGCCTGCCT	TCTGCTGCAC
	CATCAATCAA	CACGAGTACA	TACACGATCT	ATATAATCGT	GTCGGACGGA	AGACGACGTG
1741	AACGCCTTAG	AGACCCGGCC	TTTCAATGAG	CTTAGCTTGT	GCTCTGTTTC	TGCTCTCTTA '
	TTGCGGAATC	TCTGGGCCGG	AAAGTTACTC	GAATCGAACA	CGAGACAAAG	ACGAGAGAAT
1801	GGTCTAAACT	ATGGTGTCAG	TTTTAATAGA	ACAAAAGTAT	GCATCTTGCC	TTGGCTTGAG
	CCAGATTTGA	TACCACAGTC	AAAATTATCT	TGTTTTCATA	CGTAGAACGG	AACCGAACTC
1861	CCTTTTCGTT	TTCAATGCTG	ACTTCTCCCC	TTTCTCTCCT	GTGCTCACCT	TACCTTTCCA
***************************************	GGAAAAGCAA	AAGTTACGAC	TGAAGAGGGG	AAAGAGAGGA	CACGAGTGGA	ATGGAAAGGT
1921			AAGGAGGCGT			
	CTCACATTCC	CTGTTGAAAA	TTCCTCCGCA	CAGGGACCAT	CCCCGTAGGG	ACAAGTGGTC
1981			TGACTGACAT			
			ACTGACTGTA			
2041			GGTGGAGGCA			
			CCACCTCCGT		······································	
2101			TCTCTGTATA			
			AGAGACATAT			····
2161			TTCTTGGATG			
			AAGAACCTAC			
2221			GACAGTCACC			
			CTGTCAGTGG			
2281			CATGGCTATT			
			GTACCGATAA			
2341			ATGCTAAGTT			
			TACGATTCAA	· · · · · · · · · · · · · · · · · · ·		
2401			AAGCTGTACG			
			TTCGACATGC			
2461			AGTAGTGGAA			
	GTACGTTACT	GTTTCACGAG	TCATCACCTT	CCGTCCGACA	CTGGTCAGAC	GGACGAGGAA



Title: Gene Necessary for Striatal Function... Inv ntor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 16 of 37

2521	ሽ ሮ ሞ እ ሞ አ አ ሞ ምር	#CXCCX####C	TT N CT CC N N C	7 CM7 C7 MCC7	0000000000	
2321						TGTGGGGGCA
0501						ACACCCCGT
2581						GTACTAGCTC
						CATGATCGAG
2641						TGTGAAATAA
	TCACGAGTTA	GAGGTCCATG	ATATATATGT	AAACGGGCAA	AATAGAGATT	ACACTTTATT
2701	ATCCCCAAAC	ACTTGTTTAT	CGTGTAGCGT	ACCTAAAAGA	CTATTCTATT	ATGGGTGTCC
	TAGGGGTTTG	TGAACAAATA	GCACATCGCA	TGGATTTTCT	GATAAGATAA	TACCCACAGG
2761	CCACTTTCTT	GGTTTGGTCA	CCCCGATCCC	CCGGTCTTCT	GCTGTATCTA	GAACAGTGAC
	GGTGAAAGAA	CCAAACCAGT	GGGGCTAGGG	GGCCAGAAGA	CGACATAGAT	CTTGTCACTG
2821	TATAAATGAT	GTATGGGAAT	AGTGTTTCCA	TATGATCTGT	TGTCTGGAGT	ATATGCTACA
						TATACGATGT
2881						TCTCTCTGTG
			TGGGTCACGT			
2941			AAAATCACGT			
						TTGTGAATTG
3001						CACAGGAACA
5001			ACCTAAGAAA			
3061						
3001			CGCCATCCAC GCGGTAGGTG			
2121		····		······································		
3121			ACACCTGCTG			
2101			TGTGGACGAC			
3181			CCAAAGCCTT			
2011			GGTTTCGGAA	·····		
3241	•		CAATATTATT			
			GTTATAATAA	·····		
3301			TGACATAAAA			
*************	TTTTCTACTA	AAATATACAT	ACTGTATTTT	TTTTAGAAAC	ATTTCACGCG	TTCACGTTAT
3361	ATTTAAAGAG	GTCTTATCTT	TGCATTTATA	AATTATAAAT	ATTGTACATG	TGTGTAATTT
	TAAATTTCTC	CAGAATAGAA	ACGTAAATAT	TTAATATTTA	TAACATGTAC	ACACATTAAA
3421	TTCATGTATT	CATTTGCAGT	CTTTGTATTT	AAAAAAACTT	TACTGTTATG	TTTGTATAAT
	AAGTACATAA	GTAAACGTCA	GAAACATAAA	TTTTTTGAA	ATGACAATAC	AAACATATTA
3481	AGAACATTAA	TCATTTATTA	TAACTCAGAC	AAGGTGTAAA	TAAATTCATA	ATTCAAACAG
	TCTTGTAATT	AGTAAATAAT	ATTGAGTCTG	TTCCACATTT	ATTTAAGTAT	TAAGTTTGTC
3541	CCAGTATATA	TGCATATATG	GGTGTTACAT	TGCAAAAATC	TCTATCTTTG	TTCTATTCAC
			CCACAATGTA			
3601	ATGCTTAAAG	AAGTAAGAAA	TCTTTTGTGG	АТАТСТААТТ	АТАСАТАТАА	Αςτατατατα
3001			AGAAAACACC			
3661			TATTTAGAAA			
2001			ATAAATCTTT			
2721						
3721			TTTTTAAAAT AAAAATTTTA			
	CACTIATTAA	CITAIGITGT	MANAATTTTA	IIIIIIII	IIIIIIII	IIIIIIIIT



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 17 of 37

<i>≿</i> /	# #8 wit 12 (*****)
O EMPE	
OER	

3781	AAAATTTTTT	TTTTTTTTT	TTATTCCAGA	GATTAAAGAC	ACTAGATCTT	TAACCTTGAA
	TTTTAAAAAA	AAAAAAAAA	AATAAGGTCT	CTAATTTCTG	TGATCTAGAA	ATTGGAACTT
3841	GGGCAGGCAA	GAGGTCGGCA	ATGCTGTCAA	CATAGAAGTC	AGGGACCATT	TTCTTCTTGA
						AAGAAGAACT
3901	ACATGCAGTC	ACTTTCCTGA	TTGCTCTTCA	CATCCTCAAG	GCTCCGGAAT	TCCGGGGGTG
	TGTACGTCAG	TGAAAGGACT	AACGAGAAGT	GTAGGAGTTC	CGAGGCCTTA	AGGCCCCCAC
3961	TGGTGGGCTT	TGATCTCAGG	ACTCTGGAGG	CAGAAGCAGG	CAGATCTCTG	TGAATATGAG
	ACCACCCGAA	ACTAGAGTCC	TGAGACCTCC	GTCTTCGTCC	GTCTAGAGAC	ACTTATACTC
4021	GCCAGCCTGC	ACTACACAGA	GCTCCAGACC	AGTCATGGCT	ACATCATGAA	ACCCTGTCTC
	CGGTCGGACG	TGATGTGTCT	CGAGGTCTGG	TCAGTACCGA	TGTAGTACTT	TGGGACAGAG
4081	AAAAAGAAAA	TAAAAACTGT	TGTGTTTCTA	CCATAGTGTT	AAACTCAGAG	TCTGAGTAAT
	TTTTTCTTTT	ATTTTTGACA	ACACAAAGAT	GGTATCACAA	TTTGAGTCTC	AGACTCATTA
4141	GTCGGGCTGA	CATGCTCGGG	TGTTTAACAT	ACCTTCAGCT	TTGACGAGGC	GCTGAACAGT
	CAGCCCGACT	GTACGAGCCC	ACAAATTGTA	TGGAAGTCGA	AACTGCTCCG	CGACTTGTCA
4201	CAAAGTCTGG	CCTTGGGGAG	CGGTGGCTGT	GTTTGTGCTC	AAGTCCACCG	TGAAATCCTG
	GTTTCAGACC	GGAACCCCTC	GCCACCGACA	CAAACACGAG	TTCAGGTGGC	ACTTTAGGAC
4261	ATTGTGAATT	TGGACAACCG	TGTCCTTCTT	CTTGGCCTTC	CATGCAACCT	CCAACTTCAT
	TAACACTTAA	ACCTGTTGGC	ACAGGAAGAA	GAACCGGAAG	GTACGTTGGA	GGTTGAAGTA
4321	GTTGGTCATT	TTGTCAAAAC	ACTGTGTGAT	GTTTTTATCA	ATATACTGCC	ATTCCACATA
	CAACCAGTAA	AACAGTTTTG	TGACACACTA	CAAAAATAGT	TATATGACGG	TAAGGTGTAT
4381	TGTAGAGATG	TAGTCTGCCT	GGCTTTCCTT	TTCTTTAGCC	AATCGAATGC	TCTTGATCAT
******	ACATCTCTAC	ATCAGACGGA	CCGAAAGGAA	AAGAAATCGG	TTAGCTTACG	AGAACTAGTA
4441		TCATCTCTAG				
	CGGGAGTTAG	AGTAGAGATC	GAAAATAGTG	CAGAGACGAT	TAAGGACTTT	GAACTTAGCT
4501		TGGTTCATCT				
		ACCAAGTAGA				
4561		TCCATGTCAA				
	GAGCATGAGG	AGGTACAGTT	TCAGTGACTG	TGTGAGTAGC	AGTAACCACA	TCCTTTCGAC
4621		ATCAGTTCCT				
	GAGAAACCAT	TAGTCAAGGA	AATCGGTCCT	CTAACAAAAC	AAGTGTGACA	GATGGGGACT
4681		TGGAAAACTG				
		ACCTTTTGAC				
4741		TGCTTGGGAA				
		ACGAACCCTT				
4801		TTCAACATCA				
		AAGTTGTAGT			···	
4861		GACATCACTG				
		CTGTAGTGAC				
4921		TTCATGTTGT				
		AAGTACAACA				
4981		TTCACAGCCT				
	AAATTGAGAG	AAGTGTCGGA	CGTGACTAAA	AAAGACCTGT	TTAAGAAGTT	ACCGTAGATA



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 18 of 37

504	L TATCGCTTTT	GCTACTACGT	TTGGGTCCTG	TTGAGCATTT	CCTTCAAAAA	CAAAAAAGC
	ATAGCGAAAA	CGATGATGCA	AACCCAGGAC	AACTCGTAAA	GGAAGTTTTT	GTTTTTTCG
510:	ACATTTTAA	AAAGTCAAGG	TTAAGATCCA	CCTGCAAAAA	AAAGCTGCAA	TATAAGCGAG
	TGTAAAAATT	TTTCAGTTCC	AATTCTAGGT	GGACGTTTTT	TTTCGACGTT	ATATTCGCTC
516	GAATTCTAGT	TGTCACAGGA	AATAAAAATG	TCTGTTCCCA	CTATAATCAA	TGTAGACTGA
	CTTAAGATCA	ACAGTGTCCT	TTATTTTTAC	AGACAAGGGT	GATATTAGTT	ACATCTGACT
5221	TAATATTATG	CCAGCAAATA	GTTTTGAAGT	CCTAGGCACA	GTGGGAGGAG	GTTTTGTTCC
	ATTATAATAC	GGTCGTTTAT	CAAAACTTCA	GGATCCGTGT	CACCCTCCTC	CAAAACAAGG
5281	ACGCTGTTCA	TAAGCCAATA	CCCCAGCAAA	AGACCTTAAA	GGACAACTTG	TAATTTGGGA
	TGCGACAAGT	ATTCGGTTAT	GGGGTCGTTT	TCTGGAATTT	CCTGTTGAAC	ATTAAACCCT
5341	CATTCACATC	TGTCCTCTTC	ATCTGATCTG	GCTCCCAGTG	TCACTCTCTA	ACACGGTCCT
	GTAAGTGTAG	ACAGGAGAAG	TAGACTAGAC	CGAGGGTCAC	AGTGAGAGAT	TGTGCCAGGA
5401	TAGAGGGACA	ATTTATCCCT	GCCTCTGCTT	GATCTTATGC	ATGTATCTGT	ATTCTTCCAG
	ATCTCCCTGT	TAAATAGGGA	CGGAGACGAA	CTAGAATACG	TACATAGACA	TAAGAAGGTC
5461	CCATCCCTGG	CGACCTGATT	TTTCTAAGGC	ACCCAAAACT	GTAAGCTACT	TCTTATAATC
	GGTAGGGACC	GCTGGACTAA	AAAGATTCCG	TGGGTTTTGA	CATTCGATGA	AGAATATTAG
5521	TATAATTCTG	AGCATATTAG	TTAGCCTGAG	CCTCCAGGAT	ATCTTTCTTC	CCTATACTCA
	ATATTAAGAC	TCGTATAATC	AATCGGACTC	GGAGGTCCTA	TAGAAAGAAG	GGATATGAGT
5581	GTCCAGTTTT	AGCTGCCCAG	AAGGATTCAA	AGCTGATCTA	CGAGTAGATC	ACTCCTGTCT
	CAGGTCAAAA	TCGACGGGTC	TTCCTAAGTT	TCGACTAGAT	GCTCATCTAG	TGAGGACAGA
5641	ACAGCTTGTT	CCAGATCTTG	TTTCTCAAGC	CCTGGAAGCC	ATCAGCCAGG	TAAGATTGTA
	TGTCGAACAA	GGTCTAGAAC	AAAGAGTTCG	GGACCTTCGG	TAGTCGGTCC	ATTCTAACAT
5701	AAACAATCCC	TTTCTAATCA	TGGGTGTGGC	CCAAAGTGAA	TGGCCGGAAT	TC
	TTTGTTAGGG	AAAGATTAGT	ACCCACACCG	GGTTTCACTT	ACCGGCCTTA	AG



Titl: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 19 of 37

PstI (3200)

HindIII (3248)

EcoRI (3948)

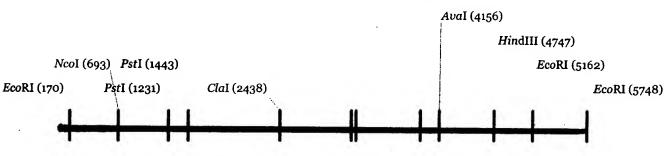
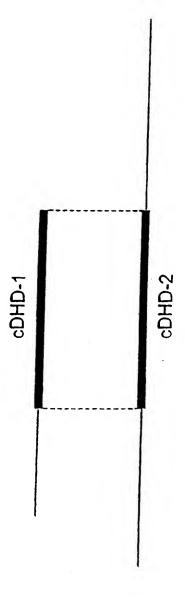


Figure 13 5752 bp



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 20 of 37





1201

Figure 15

Title: Gen Necessary for Striatal Function...

Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102

Page 21 of 37

	9						
	1	CGCCCGGGCA	GGTCTGTTGG	AGGGCAGTTG	GTCAACCTGA	CCAGAGAGAG	CTGAGCTGGA
		GCGGGCCCGT	CCAGACAACC	TCCCGTCAAC	CAGTTGGACT	GGTCTCTCTC	GACTCGACCT
	61	AGACCCCACT	GATGGTGTGC	TGCCTTTCAG	TCCAGGAAGA	AAGAAAGGAA	GGATTCTGAG
		TCTGGGGTGA	CTACCACACG	ACGGAAAGTC	AGGTCCTTCT	TTCTTTCCTT	CCTAAGACTC
	121	GATTTGGGCA	AAGCCACATT	CCTGGAGAAG	TCTGTATACT	GATGCCAAAC	CCAAGAGCTG
		CTAAACCCGT	TTCGGTGTAA	GGACCTCTTC	AGACATATGA	CTACGGTTTG	GGTTCTCGAC
	181	AGCTGCTGAT	GAGGCCCAGG	GAGTAGCCCA	CGCGCCCTGA	GCTGTTGGCT	AGCAAGGCCT
		TCGACGACTA	CTCCGGGTCC	CTCATCGGGT	GCGCGGGACT	CGACAACCGA	TCGTTCCGGA
	241			AAAAATTATA			
		AGGACGAGGT	ACACCGTACC	TTTTTAATAT	ACCAAACTGC	CTACTTTTCC	ACTTCCGGAT
	301	TCTTTCTCTC	CATCCCCAGG	TATTAGATGA	ATTTGTTTCT	GAAAGTGTTA	GTGCAGAGAC
		AGAAAGAGAG	GTAGGGGTCC	ATAATCTACT	TAAACAAAGA	CTTTCACAAT	CACGTCTCTG
	361			GGAAAACCAA			
		ACACCTTTTC	ACCGACTTCT	CCTTTTGGTT	GTTTCGTTTT	CTACTTGGTA	GAGGGTTCCT
	421			CGAATATGCA			
		TCAGTCGTCC	ATGGTCCTAT	GCTTATACGT	CCCTCAGCAC	ATGCTCGACT	TGTCGATGTA
	481			GCGGGGACAA			
				CGCCCCTGTT			
	541			CCGACGGATT			
				GGCTGCCTAA			
	601			CACCCGGGAT			
				GTGGGCCCTA		~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	661			CCACCATCTC			
				GGTGGTAGAG			
	721			GGGATGAGCG			
				CCCTACTCGC			
	781			TTTGCTTGCC			
,				AAACGAACGG		· · · · · · · · · · · · · · · · · · ·	
	841			ACTGGGGCAA			
				TGACCCCGTT			
	901			GGGCTTCCGT			
				CCCGAAGGCA			
	961			TGAATGACTT			
				ACTTACTGAA			4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -
	1021			CTCTACTTGA			
				GAGATGAACT			
	1081			TCTTCCAGGT			
				AGAAGGTCCA			
	1141			AGAAGGAGGG			
		GGACAAACTG	TAACCCCTCC	TCTTCCTCCC	CTTCGGGTAG	AAGTTCTTCT	GGTTCCTCTA

CAGATTTTCC ATTGAGAAAG GGATTGCTGG TCAAGTGGCA AGAACAGGCG AAGTCTTGAA

GTCTAAAAGG TAACTCTTTC CCTAACGACC AGTTCACCGT TCTTGTCCGC TTCAGAACTT



Title: Gen Necessary for Striatal Function...
Inventor(s): Robertson, et al.
Application No.: 10/659,770
Docket No.: 2817/102
Page 22 of 37

1261	CATTCCCGAT	GCCTACGCGG	ACCCTCGCTT	TAACAGGGAG	GTGGACCTGT	ACACAGGCTA
						TGTGTCCGAT
1321						TTGGCGTGGT
						AACCGCACCA
1381						ACAACTTCAA
		TTGTTCTAGT				
1441		GTCTTCTGCG	·			
		CAGAAGACGC				
1501	·····	TGCATCTACA	······································		·····	
		ACGTAGATGT				
1561		TGGCAAGGCC	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
2002		ACCGTTCCGG				
1621		CACTTTGACA				
1021		GTGAAACTGT				
1681	·····	CGGTCTTGTG				
1,001		GCCAGAACAC				
1741		AAGAAGAACT	····			
1,41		TTCTTCTTGA				
1801		TGCATGTATG		 		
. 1001		ACGTACATAC				
1861		CTGCTAATTG				
1001		GACGATTAAC				
1921			· · · · · · · · · · · · · · · · · · ·			
1921		CAGAAGTTCG GTCTTCAAGC				
1001						
1981		TTCTCCCAGA				
2041		AAGAGGGTCT	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
2041		TCCAGCGAGT				
2101		AGGTCGCTCA			·····	
2101		GCCCTATACT				
		CGGGATATGA			_ 	
2161		CTCCACAACC				
		GAGGTGTTGG				
2221		TGCTCTGTGA				
		ACGAGACACT				
2281		TTCTGGGCTG			·	
	······································	AAGACCCGAC			·····	
2341		AGAGACAAGC				
	ATACTACCTG	TCTCTGTTCG	CTCTACTTCA	GGGAGTTCCC	GTCGAGCCTA	AGATGTTACG
2401		CCCTGCTATA				
	ACACCGGTAA	GGGACGATAT	GGTGGAACTG	CGTCTAGGAG	GGTGGGTGTC	TCGGAGACGA
2461		AGGGATAACC				
	CTTCCGGACG	TCCCTATTGG	AGTTAGTCAC	CCTCTTCCAT	TAAGCGCCCC	TTCTCTGTCG



Title: Gene Necessary for Striatal Function...

Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 23 of 37

2521		TCAGGCCCAG				
		AGTCCGGGTC				
2581		GACTGATCCT				
	CTTCCAACTT	CTGACTAGGA	CTTCACTGCA	GGACTACAGA	CGGGTCGTTG	GCTGAGTTGG
2641		ACTTCGTTCT				
	ACGAAGACAC	TGAAGCAAGA	AAAACAAAAG	TTCCCCACTT	TTGGGGGACA	GTCTTCCATG
2701		CCATGTGAAG				
	GCAGCGTATA	GGTACACTTC	GTCTGCTGAG	GGACGAACGG	CGTGTGTGGA	GCCTGTCACT
2761	GCAACCCAGG	CTCTGCCGTG	TTCAGACGTC	GGCTACTCCG	TGGCTCCACC	TGACCTCCGA
	CGTTGGGTCC	GAGACGGCAC	AAGTCTGCAG	CCGATGAGGC	ACCGAGGTGG	ACTGGAGGCT
2821	ATGCTATTTG	CTCCCAGGCC	AGCACTGCAC	TGTCTGGAGG	GGGCAGAGAC	CACAGGAGAG
	TACGATAAAC	GAGGGTCCGG	TCGTGACGTG	ACAGACCTCC	CCCGTCTCTG	GTGTCCTCTC
2881	GTTCTTGCCT	GCATCCTCCC	ATGAGGGTGT	GGCCAGTTCC	CTAGTTCTGT	GCCATGCTGC
	CAAGAACGGA	CGTAGGAGGG	TACTCCCACA	CCGGTCAAGG	GATCAAGACA	CGGTACGACG
2941	TGCTTGGTGG	CATTGGTTAG	GAATGGGACA	CACGCCCCTT	GTTGTGAAGT	TTACATGTGA
	ACGAACCACC	GTAACCAATC	CTTACCCTGT	GTGCGGGGAA	CAACACTTCA	AATGTACACT
3001	CCTTCTTATA	GGTTAACTGA	GTTTGTGGCC	TGGACACATG	TAATGAAGGT	CACAGTCCAC
	GGAAGAATAT	CCAATTGACT	CAAACACCGG	ACCTGTGTAC	ATTACTTCCA	GTGTCAGGTG
3061		GAAATCCAAA				
	TCCACTGTCT	CTTTAGGTTT	GACAACTAAT	GTCCACGTGA	TGTCCATACG	AGAAAGTCAG
3121		CACATAGGTG				
	ATAGACCCCC	GTGTATCCAC	TCAGACGAGG	TGAGTCTTNN	TTCGTATGGA	GACGGGAGTA
3181		CAGGGTACAT				
	•	GTCCCATGTA				
3241		AAAACACCTC				
		TTTTGTGGAG				
3301		AGAAAATAAA				
		TCTTTTATTT			,	
3361	GGTAAAAAAA	AAGCATGTGA	ATNNTAACAA	CNTCTANANT	NTCNCNGNAT	GTTATGGCAG
		TTCGTACACT				
3421	AATTTTAGTC	ACGTCCAAAA	CAAAAAGATT	ATTCCAGAAG	ATACCTCATC	CTATGCCTGA
		TGCAGGTTTT				
3481	AAGGCTCCAC	AGCATGGCGT	CCGTCTCCCA	GGGTTCTGAT	CCGTCTCCTC	ACGGTGCAAT
		TCGTACCGCA				
3541	CAGGCAGGAC	AGAGAGGAGG	GCTGCAGGGC	TACCACATTG	ACCCAGAAGG	TATCTCCTCT
		TCTCTCCTCC				
3601	CACCATTCAG	ACATCCATAA	GGAATGCCAA	ATGCTGTATT	GAATAGTTCT	CTGTGTGACT
		TGTAGGTATT				
3661	TTCTAGAGAA	GCCAGGACAC	CCTGAGCCTT	TCCNGGGGAA	CTCTAAGGAG	TCACAGGTTC
		CGGTCCTGTG				
3721	ACACCGTGGG	GATTTTCAGG	ATAGCATGGA	GACAGAGATC	CGGTCGTTGT	TCTCACTCGT
	TGTGGCACCC	CTAAAAGTCC	TATCGTACCT	CTGTCTCTAG	GCCAGCAACA	AGAGTGAGCA



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 24 of 37

3781	GAGCCTTGAG	AAGGAGAGAC	TGACCAGAAA	CACTCACTCA	GCACTCTGCA	GGAGCAGGAG
	CTCGGAACTC	TTCCTCTCTG	ACTGGTCTTT	GTGAGTGAGT	CGTGAGACGT	CCTCGTCCTC
3841	AAGATACTTT	AAGATGAATC	TTGGATAGAT	TTTGATACAC	CCAATACCAT	ACACACAGGA
	TTCTATGAAA	TTCTACTTAG	AACCTATCTA	AAACTATGTG	GGTTATGGTA	TGTGTGTCCT
3901	GCTTGGCATT	TGCAAAGTCT	ATTCAGTTTC	CTTCCGCGCT	CTGACCCACG	GTTGTAGCGG
	CGAACCGTAA	ACGTTTCAGA	TAAGTCAAAG	GAAGGCGCGA	GACTGGGTGC	CAACATCGCC
3961	AGTGGGCTGA	ACACTGTAAC	ACTGTACATG	CGATTTCCCC	ATGGGCTTCT	AAAATGTCAC
	TCACCCGACT	TGTGACATTG	TGACATGTAC	GCTAAAGGGG	TACCCGAAGA	TTTTACAGTG
4021	CATCTCCTCC	CCTGCTGTGT	CCTACTCCAT	TTACTGGTTA	CAAGGTGATG	TCAACAAGAG
	GTAGAGGAGG	GGACGACACA	GGATGAGGTA	AATGACCAAT	GTTCCACTAC	AGTTGTTCTC
4081			CTGTGCACAC			
	TTCGATAGTG	TTGTGGTCCC	GACACGTGTG	CACGTGTGTG	TACATACGTG	TTCGTGTGTC
4141			CACACACA			
	TACATACATG	TCGTGTGTGT	GTGTGTGTGT	GGGGTTTTCC	TCTCTTTTCC	TTCTTTTGTA
4201			CCCATATCAA			
	AATATTTTC	GCTGTCGATG	GGGTATAGTT	TTATCAGAAA	GGACATCCTT	TGTCCTCGAG
4261			GTGTGTTCTC			
	AGGTATTCCT	TAATAGTACT	CACACAAGAG	GGTAGTCACG	TGAGAGGGTC	CCCACGAGTG
4321			AAACAGGTGA			
	ACTTCGACCA	GGTGYAGATA	TTTGTCCACT	GTGACCGACG	TCGTTTTTCG	GTAAGCTAGG
4381			ATCTTGGAAT			
			TAGAACCTTA			
4441			TCCGAAGGCA			
	·		AGGCTTCCGT			
4501			AAACCTATGA			
			TTTGGATACT			
4561			TTGCCCTGCC			
			AACGGGACGG			
4621			TCTTGTGAAA			
			AGAACACTTT			
4681			CTTTGCAACA			
			GAAACGTTGT			
4741			AATAAACTAG			
			TTATTTGATC			
4801			GGCAGGATTG			
			CCGTCCTAAC			
4861			ATCCTGCCTC			
			TAGGACGGAG			
4921			TCCAGGAATT			
			AGGTCCTTAA			
	2022002	λ ͲλͲλλλ Γλλ	TGCTCACCTC	ACCAAAATTA	TATTATTTGC	AGTCATTTGT
4981			ACGAGTGGAG			



Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 25 of 37

5041	GATAACACAA	ATTTTATCGC	AATGGTTATT	ATTTAATTTG	TGGCCACACA	CTGTGGTTAT
	CTATTGTGTT	TAAAATAGCG	TTACCAATAA	TAAATTAAAC	ACCGGTGTGT	GACACCAATA
5101			GAGAAAATGT			
	GAAAACAACA	CCAACAAAGA	CTCTTTTACA	AGAACCTATA	CATTCACGGT	TATGGTCACA
5161	GAAGTATTGA	TCCCGGGCAG	CAAAATACAG	CCTAAGGTTT	GTAAACATCA	ATTCTATCTC
	CTTCATAACT	AGGGCCCGTC	GTTTTATGTC	GGATTCCAAA	CATTTGTAGT	TAAGATAGAG
5221			AAGCTGCGGG			
	TCAAGTAGTC	TCCCGGACTC	TTCGACGCCC	CGTCACATTT	CATTTCATAC	GACCCGACCA
5281	GGTGGTCAGC	CTCCCCTTGC	CAAGAAGAGA	GCAATTGAAT	CCTGTCCCCA	GCTCCCTCCA
	CCACCAGTCG	GAGGGGAACG	GTTCTTCTCT	CGTTAACTTA	GGACAGGGGT	CGAGGGAGGT
5341	CGCCTGAAGA	GTGACCAGTG	CTGGCCCGAC	GGATCGCTGA	GATATTCTCC	CATAATGGCA
*****	GCGGACTTCT	CACTGGTCAC	GACCGGGCTG	CCTAGCGACT	CTATAAGAGG	GTATTACCGT
5401	AAAAAATAGG	CAGTTTGATG	TGACCTGTTT	AGTGTGGCTC	TCCTCTTTTG	AGCATGTGTT
	TTTTTTATCC	GTCAAACTAC	ACTGGACAAA	TCACACCGAG	AGGAGAAAAC	TCGTACACAA
5461	AGCATTTTTA	TTTTATACTC	ATCCAGTGAA	CTCTGCTCTT	CCAAGTGTGT	TCATGTATGT
******************	TCGTAAAAAT	AAAATATGAG	TAGGTCACTT	GAGACGAGAA	GGTTCACACA	AGTACATACA
5521	GCTAGATATA	TTAGCACAGC	CTGCCTTCTG	CTGCACAACG	CCTTAGAGAC	CCGGCCTTTC
	CGATCTATAT	AATCGTGTCG	GACGGAAGAC	GACGTGTTGC	GGAATCTCTG	GGCCGGAAAG
5581	AATGAGCTTA	GCTTGTGCTC	TGTTTCTGCT	CTCTTAGGTC	TAAACTATGG	TGTCAGTTTT
	TTACTCGAAT	CGAACACGAG	ACAAAGACGA	GAGAATCCAG	ATTTGATACC	ACAGTCAAAA
5641	AATAGAACAA	AAGTATGCAT	CTTGCCTTGG	CTTGAGCCTT	TTCGTTTTCA	ATGCTGACTT
	TTATCTTGTT	TTCATACGTA	GAACGGAACC	GAACTCGGAA	AAGCAAAAGT	TACGACTGAA
5701	CTCCCCTTTC	TCTCCTGTGC	TCACCTTACC	TTTCCAGAGT	GTAAGGGACA	ACTTTTAAGG
****	GAGGGGAAAG	AGAGGACACG	AGTGGAATGG	AAAGGTCTCA	CATTCCCTGT	TGAAAATTCC
5761			CATCCCTGTT			
	TCCGCACAGG	GACCATCCCC	GTAGGGACAA	GTGGTCCACG	GACAGTAGTG	GGGTGAACTG
5821	TGACATCTAC	CCTGGTGACT	ATGGGTTCCT	CTTGTTTGTA	GGGAACGGTG	GCTCCAGGTG
*****	ACTGTAGATG	GGACCACTGA	TACCCAAGGA	GAACAAACAT	CCCTTGCCAC	CGAGGTCCAC
5881			TCTGGTTCCC			
***************************************	CTCCGTAGTT	AGACAACCCA	AGACCAAGGG	CCGACGGAAA	CCAAAACTTT	CAGAGAAGAG
5941	TGTATATTCC	TACCCTGCAT	TTGCTTTGTG	TGGTGCTGAT	GCTGTGGCAG	TAGGATCTTG
			AACGAAACAC			
6001			AGACTCCCCC			
			TCTGAGGGGG		·····	
6061			TCACACACAG			
			AGTGTGTGTC			
6121			GTTTCTGTTG	•		
			CAAAGACAAC			
6181			CCAGCAGAGC			
			GGTCGTCTCG			
6241			CGTATTTAAA			
	ACATGCCAAA	CTAGCTACTT	GCATAAATTT	CGTAAAGTAC	GTTACTGTTT	CACGAGTCAT



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 26 of 37

6301	GTGGAAGGCA	GGCTGTGACC	AGTCTGCCTG	CTCCTTACTA	TAATTGTGAG	GATTTGTTAC
	CACCTTCCGT	CCGACACTGG	TCAGACGGAC	GAGGAATGAT	ATTAACACTC	CTAAACAATG
6361	TGGAACAGTA	CATGGAGGCC	TGACCTTGTG	GGGGCACAGG	GTGGAACCTT	AGCTGAATAT
	ACCTTGTCAT	GTACCTCCGG	ACTGGAACAC	CCCCGTGTCC	CACCTTGGAA	TCGACTTATA
6421	AGTGTGTGTC	TCAAGAGGAA	GTCAGGGTAC	TAGCTCAGTG	CTCAATCTCC	AGGTACTATA
	TCACACACAG	AGTTCTCCTT	CAGTCCCATG	ATCGAGTCAC	GAGTTAGAGG	TCCATGATAT
6481	TATACATTTG	CCCGTTTTAT	CTCTAATGTG	AAATAAATCC	CCAAACACTT	GTTTATCGTG
	ATATGTAAAC	GGGCAAAATA	GAGATTACAC	TTTATTTAGG	GGTTTGTGAA	CAAATAGCAC
6541	TAGCGTACCT	AAAAGACTAT	TCTATTATGG	GTGTCCCCAC	TTTCTTGGTT	TGGTCACCCC
	ATCGCATGGA	TTTTCTGATA	AGATAATACC	CACAGGGGTG	AAAGAACCAA	ACCAGTGGGG
6601	GATCCCCCGG	TCTTCTGCTG	TATCTAGAAC	AGTGACTATA	AATGATGTAT	GGGAATAGTG
	CTAGGGGGCC	AGAAGACGAC	ATAGATCTTG	TCACTGATAT	TTACTACATA	CCCTTATCAC
6661			TGGAGTATAT			
	AAAGGTATAC	TAGACAACAG	ACCTCATATA	CGATGTACAA	GTAAATGACA	TGTTTTTGGG
6721	AGTGCAGCTG	ATGATGCAAA	GCAGTCTCTC	TCTGTGTACA	GTGCCCCACC	TATTTAAAAA
	TCACGTCGAC	TACTACGTTT	CGTCAGAGAG	AGACACATGT	CACGGGGTGG	ATAAATTTTT
6781			CTGTGAAACA			
	AGTGCATGTT	NGGGTCTTGT	GACACTTTGT	GAATTGTATT	CTTTGTTTGC	GTCGCAGACC
6841			CTTTCTCCAC			
-	TAAGAAAGGT	TCCTCTCGTC	GAAAGAGGTG	TCCTTGTGTC	ATTGTTTTCT	CCAGGCGGCG
6901			ACCTCAGAGG			
			TGGAGTCTCC			
6961			GTCCCAGCAA			
			CAGGGTCGTT			
7021			TGAAGGGGAA			
			ACTTCCCCTT			
7081			GTAAATTCCG			
			CATTTAAGGC			
7141			TGCGCAAGTG			
			ACGCGTTCAC			
7201			ACATGTGTGT			
<u></u>			TGTACACACA			
7261			TTATGTTTGT			
			AATACAAACA			
7321			TCATAATTCA			
			AGTATTAAGT			
7381			CTTTGTTCTA			
			GAAACAAGAT			
7441			TATAAAGTAT			
			ATATTTCATA			
7501			TGGATATTCT			
	TCTTTACAAG	TATTAAAATT	ACCTATAAGA	AACCACACTT	ATTAACTTAT	GTTGTAAAAA



Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 27 of 37

7561 AAAATGAAAA AAAAAAAAA C TTTTACTTTT TTTTTTTT G



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102

Page 28 of 37

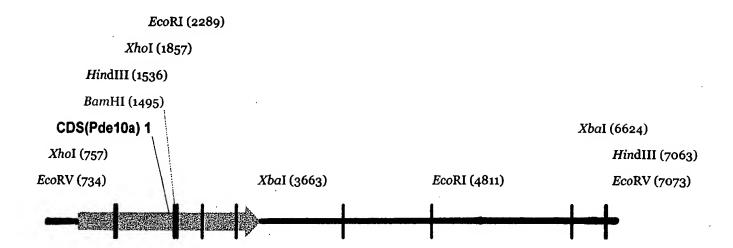
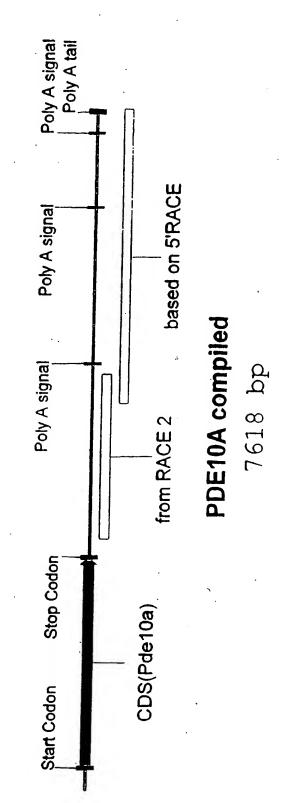


Figure 16 7581 bp



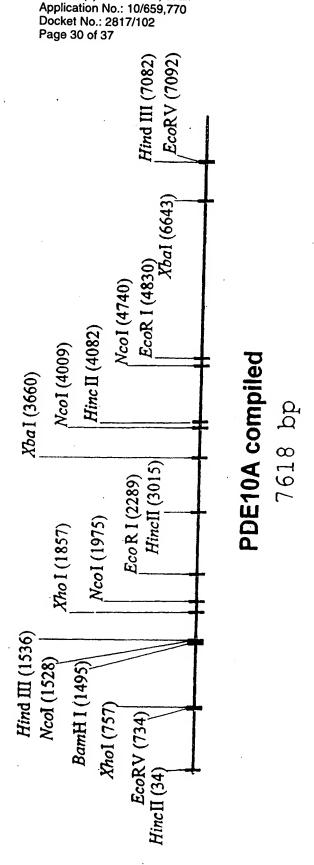
PDE10A compiled - coding sequence and features

Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 29 of 37





PDE10A compiled - restriction sites



Title: Gene Necessary for Striatal Function...

Inventor(s): Robertson, et al.



Titl: Gene Nec ssary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Pag 31 of 37

1	CGCCCGGGCA	GGTCTGTTGG	AGGGCAGTTG	GTCAACCTGA	CCAGAGAGAG	CTGAGCTGGA
	GCGGGCCCGT	CCAGACAACC	TCCCGTCAAC	CAGTTGGACT	GGTCTCTCTC	GACTCGACCT
61	AGACCCCACT	GATGGTGTGC	TGCCTTTCAG	TCCAGGAAGA	AAGAAAGGAA	GGATTCTGAG
	TCTGGGGTGA	CTACCACACG	ACGGAAAGTC	AGGTCCTTCT	TTCTTTCCTT	CCTAAGACTC
121	GATTTGGGCA	AAGCCACATT	CCTGGAGAAG	TCTGTATACT	GATGCCAAAC	CCAAGAGCTG
	CTAAACCCGT	TTCGGTGTAA	GGACCTCTTC	AGACATATGA	CTACGGTTTG	GGTTCTCGAC
181	AGCTGCTGAT	GAGGCCCAGG	GAGTAGCCCA	CGCGCCCTGA	GCTGTTGGCT	AGCAAGGCCT
	TCGACGACTA	CTCCGGGTCC	CTCATCGGGT	GCGCGGGACT	CGACAACCGA	TCGTTCCGGA
241	TCCTGCTCCA	TGTGGCATGG	AAAAATTATA	TGGTTTGACG	GATGAAAAGG	TGAAGGCCTA
	AGGACGAGGT	ACACCGTACC	TTTTTAATAT	ACCAAACTGC	CTACTTTTCC	ACTTCCGGAT
301	TCTTTCTCTC	CATCCCCAGG	TATTAGATGA	ATTTGTTTCT	GAAAGTGTTA	GTGCAGAGAC
	AGAAAGAGAG	GTAGGGGTCC	ATAATCTACT	TAAACAAAGA	CTTTCACAAT	CACGTCTCTG
361	TGTGGAAAAG	TGGCTGAAGA	GGAAAACCAA	CAAAGCAAAA	GATGAACCAT	CTCCCAAGGA
	ACACCTTTTC	ACCGACTTCT	CCTTTTGGTT	GTTTCGTTTT	CTACTTGGTA	GAGGGTTCCT
421	AGTCAGCAGG	TACCAGGATA	CGAATATGCA	GGGAGTCGTG	TACGAGCTGA	ACAGCTACAT
	TCAGTCGTCC	ATGGTCCTAT	GCTTATACGT	CCCTCAGCAC	ATGCTCGACT	TGTCGATGTA
481	AGAGCAGCGC	CTGGACACGG	GCGGGGACAA	CCACCTGCTC	CTCTATGAGC	TCAGCAGCAT
•	TCTCGTCGCG	GACCTGTGCC	CGCCCCTGTT	GGTGGACGAG	GAGATACTCG	AGTCGTCGTA
541	CATCAGGATA	GCCACAAAAG	CCGACGGATT	TGCACTGTAC	TTCCTTGGAG	AGTGCAATAA
	GTAGTCCTAT	CGGTGTTTTC	GGCTGCCTAA	ACGTGACATG	AAGGAACCTC	TCACGTTATT
601	TAGCCTGTGT	GTGTTCATAC	CACCCGGGAT	GAAGGAAGGC	CAACCCCGGC	TCATCCCTGC
	ATCGGACACA	CACAAGTATG	GTGGGCCCTA	CTTCCTTCCG	GTTGGGGCCG	AGTAGGGACG
661	AGGGCCCATC	ACCCAGGGTA	CCACCATCTC	TGCCTACGTG	GCCAAGTCTA	GGAAGACGTT
	TCCCGGGTAG	TGGGTCCCAT	GGTGGTAGAG	ACGGATGCAC	CGGTTCAGAT	CCTTCTGCAA
721	GTTGGTAGAG	GATATCCTTG	GGGATGAGCG	ATTTCCTCGA	GGTACTGGCC	TGGAATCAGG
	CAACCATCTC	CTATAGGAAC	CCCTACTCGC	TAAAGGAGCT	CCATGACCGG	ACCTTAGTCC
781	AACCCGCATC	CAGTCTGTTC	TTTGCTTGCC	CATTGTCACT	GCCATTGGAG	ACTTGATTGG
	TTGGGCGTAG	GTCAGACAAG	AAACGAACGG	GTAACAGTGA	CGGTAACCTC	TGAACTAACC
841	CATCCTTGAA	CTGTACAGGC	ACTGGGGCAA	AGAGGCCTTC	TGCCTCAGCC	ATCAGGAGGT
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901	TGCAACAGCC	AATCTTGCTT	GGGCTTCCGT	AGCAATACAC	CAGGTGCAGG	TGTGTAGAGG
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961	TCTCGCCAAA	CAGACCGAAC	TGAATGACTT	CCTACTCGAC	GTATCAAAGA	CATACTTTGA
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1021	TAACATAGTT	GCCATAGACT	CTCTACTTGA	ACACATCATG	ATATATGCAA	AAAATCTAGT
	ATTGTATCAA	CGGTATCTGA	GAGATGAACT	TGTGTAGTAC	TATATACGTT	TTTTAGATCA
1081	GAACGCCGAC	CGCTGCGCGC	TCTTCCAGGT	GGACCACAAG	AACAAGGAGC	TGTACTCGGA
	CTTGCGGCTG	GCGACGCGCG	AGAAGGTCCA	CCTGGTGTTC	TTGTTCCTCG	ACATGAGCCT
1141	CCTGTTTGAC	ATTGGGGAGG	AGAAGGAGGG	GAAGCCCATC	TTCAAGAAGA	CCAAGGAGAT
	GGACAAACTG	TAACCCCTCC	TCTTCCTCCC	CTTCGGGTAG	AAGTTCTTCT	GGTTCCTCTA
1201	CAGATTTTCC	ATTGAGAAAG	GGATTGCTGG	TCAAGTGGCA	AGAACAGGCG	AAGTCTTGAA
		TAACTCTTTC				
	,		·	***************************************		



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 32 of 37

1321 CA GT 1381 GC CG 1441 GA CT 1501 CC	CAAGGGCTA ACCACGAGG CGGTGCTCC CAGATGGTG CTCTACCAC ATGTTTGCT CACAAACGA CACTCAGAA CTGAGTCTT	CGGATGCGCC AACATTCTGT TTGTAAGACA AACAAGATCA TTGTTCTAGT GTCTTCTGCG CAGAAGACGC TGCATCTACA	GCGGTAGCGC CGCCATCGCG CACTGGCCTT GTGACCGGAA	ATTGTCCCTC AGTGAGCCGA TCACTCGGCT CTTCTCCAAG GAAGAGGTTC GCACTGTGCT	CACCTGGACA GGCAGCGTGA CCGTCGCACT ACAGACGAGA TGTCTGCTCT	TGTGTCCGAT TTGGCGTGGT AACCGCACCA ACAACTTCAA
1321 CA GT 1381 GC CG 1441 GA CT 1501 CC	CCACGAGG GGTGCTCC CAGATGGTG GTCTACCAC ATGTTTGCT CACAAACGA CACTCAGAA GTGAGTCTT	AACATTCTGT TTGTAAGACA AACAAGATCA TTGTTCTAGT GTCTTCTGCG CAGAAGACGC TGCATCTACA	GTATGCCCAT CATACGGGTA GCGGTAGCGC CGCCATCGCG CACTGGCCTT GTGACCGGAA	AGTGAGCCGA TCACTCGGCT CTTCTCCAAG GAAGAGGTTC GCACTGTGCT	GGCAGCGTGA CCGTCGCACT ACAGACGAGA TGTCTGCTCT	TTGGCGTGGT AACCGCACCA ACAACTTCAA
1381 GC CG 1441 GA CT 1501 CC GG	CGGTGCTCC CAGATGGTG STCTACCAC ATGTTTGCT CACAAACGA CACTCAGAA CTGAGTCTT	TTGTAAGACA AACAAGATCA TTGTTCTAGT GTCTTCTGCG CAGAAGACGC TGCATCTACA	CATACGGGTA GCGGTAGCGC CGCCATCGCG CACTGGCCTT GTGACCGGAA	TCACTCGGCT CTTCTCCAAG GAAGAGGTTC GCACTGTGCT	CCGTCGCACT ACAGACGAGA TGTCTGCTCT	AACCGCACCA ACAACTTCAA
1381 GC CG 1441 GA CT 1501 CC	CAGATGGTG GTCTACCAC ATGTTTGCT CACAAACGA CACTCAGAA GTGAGTCTT	AACAAGATCA TTGTTCTAGT GTCTTCTGCG CAGAAGACGC TGCATCTACA	GCGGTAGCGC CGCCATCGCG CACTGGCCTT GTGACCGGAA	CTTCTCCAAG GAAGAGGTTC GCACTGTGCT	ACAGACGAGA TGTCTGCTCT	ACAACTTCAA
1441 GA CT 1501 CC	TCTACCAC TGTTTGCT ACAAACGA ACTCAGAA TGAGTCTT	TTGTTCTAGT GTCTTCTGCG CAGAAGACGC TGCATCTACA	CGCCATCGCG CACTGGCCTT GTGACCGGAA	GAAGAGGTTC GCACTGTGCT	TGTCTGCTCT	
1441 GA CT 1501 CC GG	TGTTTGCT ACAAACGA ACTCAGAA TGAGTCTT	GTCTTCTGCG CAGAAGACGC TGCATCTACA	CACTGGCCTT GTGACCGGAA	GCACTGTGCT		TGTTGAAGTT
1501 CC GG	ACAAACGA ACTCAGAA STGAGTCTT	CAGAAGACGC TGCATCTACA	GTGACCGGAA		N N C N M C M N C C	
1501 CC GG	ACAAACGA ACTCAGAA STGAGTCTT	CAGAAGACGC TGCATCTACA	GTGACCGGAA		AACATGTACC	ACAGGATCCG
GG	TGAGTCTT			CGTGACACGA		
			GGGTTACCAT	GGAGAAGCTT	TCCTACCACA	GCATCTGCAC
1561 CT	CCGAGGAG	ACGTAGATGT	CCCAATGGTA	CCTCTTCGAA	AGGATGGTGT	CGTAGACGTG
1001 C1		TGGCAAGGCC	TCATGCGCTT	CAACCTACCA	GCACGCATCT	GCCGGGACAT
GA	GGCTCCTC	ACCGTTCCGG	AGTACGCGAA	GTTGGATGGT	CGTGCGTAGA	CGGCCCTGTA
1621 CG	AGCTATTC	CACTTTGACA	TTGGTCCTTT	CGAGAACATG	TGGCCTGGGA	TETTTGTCTA
GC	TCGATAAG	GTGAAACTGT	AACCAGGAAA	GCTCTTGTAC	ACCGGACCCT	AGAAACAGAT
1681 CA	TGATCCAT	CGGTCTTGTG	GGACATCCTG	TTTTGAACTT	GAAAAATTGT	GCCGTTTTAT
GT	ACTAGGTA	GCCAGAACAC	CCTGTAGGAC	AAAACTTGAA	${\tt CTTTTTAACA}$	CGGCAAAATA
1741 CA	TGTCTGTG	AAGAAGAACT	ATCGGCGGGT	TCCTTACCAC	AACTGGAAGC	ATGCAGTCAC
GT	ACAGACAC	TTCTTCTTGA	TAGCCGCCCA	AGGAATGGTG	TTGACCTTCG	TACGTCAGTG
1801 GG	TGGCACAC	TGCATGTATG	CCATACTTCA	AAACAACAAT	GGCCTCTTCA	CAGACCTCGA
CC	ACCGTGTG	ACGTACATAC	GGTATGAAGT	TTTGTTGTTA	CCGGAGAAGT	GTCTGGAGCT
1861 GC	GCAAAGGC	CTGCTAATTG	CGTGTCTGTG	CCATGACCTG	GACCACAGGG	GCTTCAGTAA
CG	CGTTTCCG	GACGATTAAC	GCACAGACAC	GGTACTGGAC	CTGGTGTCCC	CGAAGTCATT
1921 CA	GCTACCTG	CAGAAGTTCG	ACCACCCCCT	GGCGGCGCTG	TACTCCACCT	CCACCATGGA
GT	CGATGGAC	GTCTTCAAGC	TGGTGGGGGA	CCGCCGCGAC	ATGAGGTGGA	GGTGGTACCT
1981 GC	AACACCAC	TTCTCCCAGA	CGGTGTCCAT	CCTTCAGCTG	GAAGGGCACA	ATATCTTCTC
CG	TTGTGGTG	AAGAGGGTCT	GCCACAGGTA	GGAAGTCGAC	CTTCCCGTGT	TATAGAAGAG
2041 CA	CCCTGAGC	TCCAGCGAGT	ACGAGCAGGT	GCTGGAGATC	ATCCGCAAAG	CCATCATCGC
GT	GGGACTCG	AGGTCGCTCA	TGCTCGTCCA	CGACCTCTAG	TAGGCGTTTC	GGTAGTAGCG
2101 CA	CCGACCTC	GCCCTATACT	TTGGGAACAG	GAAGCAGTTG	GAGGAGATGT	ACCAGACAGG
			AACCCTTGTC			
2161 GT	CGCTGAAC	CTCCACAACC	AGTCCCATCG	AGACCGTGTC	ATCGGCTTGA	TGATGACTGC
CA	GCGACTTG	GAGGTGTTGG	TCAGGGTAGC	TCTGGCACAG	TAGCCGAACT	ACTACTGACG
			CCAAACTATG			
GA	CACTAGAA	ACGAGACACT	GGTTTGATAC	CGGTCAATGT	TTTAACTGTC	GCTTACTATA
			AGGGTGATGA			
TA	TACGTCTT	AAGACCCGAC	TCCCACTACT	CTACTTCTTC	GACCCGTATG	TCGGGTAAGG
			GAGATGAAGT			
AT	ACTACCTG	TCTCTGTTCG	CTCTACTTCA	GGGAGTTCCC	GTCGAGCCTA	AGATGTTACG
2401 TG	TGGCCATT	CCCTGCTATA	CCACCTTGAC	GCAGATCCTC	CCACCCACAG	AGCCTCTGCT
AC	ACCGGTAA	GGGACGATAT	GGTGGAACTG	CGTCTAGGAG	GGTGGGTGTC	TCGGAGACGA
2461 GA	AGGCCTGC	AGGGATAACC	TCAATCAGTG	GGAGAAGGTA	ATTCGCGGGG	AAGAGACAGC
CT	TCCGGACG	TCCCTATTGG	AGTTAGTCAC	CCTCTTCCAT	TAAGCGCCCC	TTCTCTGTCG



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 33 of 37

2521 AATGTGGATT TCAGGCCCAG GCCGGGCGC TAGCAAGAG ACACCTCAGA AGCTGACCT TTACACCTAA AGTCCGGGTC CGGGCCGCGG ATCGTTCTC TGTGGACTCT TCACTTGCA 2581 GAAGGTTGAA GACTGATCCT GAAGTGACGT CTGATGTCT TGCGCACCCACCAC CGACTCAACC CTTCCAACTT CTGACTAGGA CTTCACTGCA GGACTACAGA CGGGTGGTG GCTGAGTTGG 2641 TGCTTCTGT ACTTCGTTCT TTTTGTTTT AAGGGGACA ACCCCCTGT CAGAAGGTAC ACCAAGACAC TCAGACGAAGA AAAACAAAAG TTCCCACTT TTGGGGGACA GTCTTCCATG 2701 CGTCGGATAT CCATGTGAAG CAGACGACTC CCTGCTTGCC GGACACACCT CGGACAGTGA GCAGCGTATA GGATACACTTC GTCTGTGAG GGACGACGG CGTGTGGGA GCTCTCCATG CGTCGGGTCC GGACCGCGC TTCACGGGC GGACGACGC CGTGTGGGA GCCTGTCACT 2761 GCAACCCAGG CTCTGCCGGT TTCAGACGTC GGACGACGC CGTGTGGGA GCTGTCACT CGTTGGGTCC GAGACGCACA AAGTCTGCAG CGGACGAGGA CACGAGGGCT CGTTGGGTCC GAGACGCCAC AAGTCTGCAC TGTCTGGAG GGCCAGCACC ACAGGAGCC CGTTGGGTCC GAGACGCCAC AGCACTGCAC TGTCTGGAG GGCAGAGAC CACAGGAGC TACGATAAAC GAGGGTCCG TCGTGACGTG ACCGACGGCG CACAGGAGAC CACAGGAGC CAAGAACGAC CGTACCTCCC ATGAGGGTT GCCAGTTCC CCCTTCTG GTCTCCTCTC 2881 GTCTTGGCT GCATCCTCCC ATGAGGGTT GCCAGCTCC CCCGTCTCTG GTCTCCTCTC CAAGAACGAC CGTAGCAGGA TACCCACAC CCGGTCAAG GATCAAGACA CGGTACCAGC CAAGAACGAC GTAACCAATC CTTTACCCTGT GTCCGGGGAA CACACTTCA AATGTACACT 3001 CCTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACAAC ACACACTTCA AATGTACACT 301 CCTCTTATA GGTTAACTGA GTTTTGTGCCC TGGGACAAT GTAATGAAG TCACAGTCCA GGAAGAATAT CCAATGACT CTTACCCTGT GTCCGGGGAA CACACTTCA AATGTACAC 301 CAGGTGACAG ACAAATCCAA ACTCTTGTATT ACAGGTGCA TACAGGTATG CTCTTCAGT GTCACCTGTC TCTTTACGTT TGAACACACGG ACCACTGGTA ATTACTTC AGTGTCAAG GCCACCTCT TCTTTACGTT TGAACAACACGG ACCACTGTA ATTACTTC AGAGTACAA GGTCCACCTGT TCTTTACGTT TGACACATAA TGTCACGGT ACTGCATAC GAAAAATCCA 3121 CTATCTGGG GCACATAGGT GAGTCTGCT CACTCAGAAG GAACACTC TCCTTTCAGT GTCACCTGTC TCTTTACAGTT TGACACATCAA TGCAGGAGA CAACACTTCAAC AGAAAATCCA 3121 CTATCTGGG GCACATAGGT GAGTCTGCT CACTCAGAAC GAAACACTC ACTGTCAAC ACAGAGATCA 3121 CTATCTGGG GCACATAGGT GAGTCTGCT CACTCAGAAC GAAACACTC TCTTCAGTAC 3121 CTATCTGGG GCACATAGGT GAGTCTCCTC CACTCAGAACT TACAGGTAC CTTTTCAGTGAACT AGGTCCCCTG TGTCCCACT TACAGCACT TACAGGTATA							
2581 GAAGGTTGAA GACTGATCCT GAAGTGACGT CCTGATGTCT GCCCAGCAAC CGACTCAACC CTTCCAACTT CTGACTAGGA CTTCACTGCA GGACTACAGA CGGGTCGTTG GCTGAGTTGG 2641 TGCTTCTGTG ACTTCGTTCT TTTTGTTTCT AAGGGTGAA AACCCCCTGT GCTGAGTTGG ACGAAGACAC TGAAGCAAGA AAAACAAAAG TCCCCACTT TTGGGGGACA GTCTTCCATG 2701 CGTCGCATAT CCATGTGAAG CAGACCACTC CCTGCTTGCC GCACACACCT CGGACAGTGA GCACCGTATA GGTACACTTC GTCTGCTGAG GGACGAACGG CGTGTGTGGA GCCTGTCCACT GCACCGTATA GGTACACTTC GTCTGCTGAG GGACGAACGG CGTGTGTGGA GCCTGTCACT CGTTGGGTCC GAGACGGCAC AACTCTGCAG CGGTACACCC CGGACAGAGG CGTTGGGTCC GAGACGGCAC AACTCTGCAG CGCATCAGGG ACCGAGGAGGA CTGACGAGGT ACGATAAAC GAGGGTCCG TCCTGACCTG ACGACCACC CCCGTCTCTG GTGTCCTCT 2821 ATGCTATTTG CTCCCAGGC AGCACTGCAC TGTCTGGAGG GGCCAGAGGAC CACAGGAGGAG TACGATAAAC GAGGGTCCG TCGTGACCTG ACGACCTCC CCCGTCTCTG GTGTCCTCTC 2881 GTCTTGCCT GCATCCTCC ATGAGGGTT GGCCACTTCC CTGGTTCTGT GCCATGCTCC CAAGAACGGA CGTAGAGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACAC CGGTACCACC CAGAACCACC GATACCAATC CTTACCCCTAC CCGGTCAAGG GATCAAGACAC CGGTACCACC 2941 TGCTTGGTG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAAGT TACACACTGA ACGAACCACC GTAACCAATC CTTACCCCTG TGGGGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACCAATC CTTACCCCTG TGGGGGGAA CAACACTTCA AATGTACACT 301 CCTTCTTATA GGTTAACCAA ACTGTTGAT ACAGGTCCC TACAGGTATG CACACTCCCA GCAGGGGGAAAATAT CCAATTGACT CAAACCAAC TACACCACT CTACACCTGTA ACCACTTC TCTTCATGT TACACACTT TACACCATT TACACCACTT CTTTCAGGT GCAACACACT CTTACACCATT ACAGGTACA CACACTTCA AAGAAACCCC CCTGTATCCA CTCAGACGAA GTGAATCCAA CACACTTCAACACATA CCAATTCACCACTGAAG GAACACCTC TACACCATT AGGGGAACACCC CGTGTATCCA CTCAGACGAA GTGAATCCAA CACACTTCAACACATA ACTGTTCAACCATT ACAGGTACA CACACTTCAACCATT AGGGCAACCC CCCTTCAC TCCAGAGAGAACTCA TACACACAT ACGGCCCTTTAAACCAT AGGGACACCC CCCTTCAC TCCAGAGAGAACTCA TACAACACAT 3121 CTATCTGGG GCAACTAGCT ACCACGCCCTTCAC TCCAGAGAGAACCCC CTTCAACCACTA CACATTCTTAACA AAGAAAATAT AAAACACCT CCCCTCCCC CCCTTCAC TCCAGGAGAG CACACCCTTAAACCAT 3241 GCCAGGGAACACC AGAGGATAC TCCAAGCAGAG AGGGCACCCT TCCAGGAACTAC TCTATCACTA TCTTTAACACAAT 3361 GCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	2521	AATGTGGATT	TCAGGCCCAG	GCCCGGCGCC	TAGCAAGAGC	ACACCTGAGA	AGCTGAACGT
CTTCCAACTT CTGCTAGGA CTTCATTGT 2641 TGCTTCTGTG ACTTCGTTCT TTTGTTTTC AAGGGGTGAA AACCCCCTGT CAGAAGGTAC AACGAAGACAC TGAAGCAAGA AAACAAAAG TTCCCCCTGT TGGGGGACA TCAGAGGTAC ACGAAGCACC TGAAGCAAGA AAACAAAAG TTCCCCCTGTTCCCATT GGGGACA GTGAGCAGA AAACCAACAG CTGGGGCACA TCCCAGTTGTGGGGACA GTGGGGCAGA GTGGGGGCAG GTGTGGGGACA GTGGGGCAGA GTGGGGGCAG GTGGGGGACA GTGGGGCACCT GGACACCT GGACACCT GGACACCT GGACAGCT GGACACCT CGACACCT AACGCCCACC AGACACCT CGACACCT ACGCTAGAGAC GCTTAGGAGAC AAGCCTC CCCGTCTTG GGTCCTCTC CTACGATTAAA GAGGGTCCGG TCCGTAGACGT ACGACACCC CCGTCTTG GGTCCTCTC CAACAACCGA CGTAGGAGG TACTCCCACA CCGGTCAAGA GACACCT CCACACACC CAACAACCGA CGTAGGAGG ATCTCCCACA CCGGTCAAGA GAACACCT CAACAACCAC GTAACACACC GAACACACC GTAACACACC GAACACACC GTAACACACC GAACACACC GTAACACACC GAACACACC GTAACACACC GTAACACACC GAACACACT AAACACCAC GTAACACCC GAACACACT AAACACCAC GTAACACACC GAACACCT CAACACCCA GTAACACACC GAACACCT CAACACCCA GTAACACCAC GTAACACCAC GTAACACCAC GTAACACCC GAACACCT GTAATGAAG GAACACACT CAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCC GAACACCT CAACACCCA GTAACACCCA GTAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCCA GTAACACCCA GTAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCCA GTAACACCCA GAACACCT CAACACCCA GTAACACCCA GTAACACCAC GAACACCT CAACACCCA GTAACACCCA GAACACCT CAACACCCA GAACACCT CAACACCAC GAACACCC CAACACCACAC CAACACCACAC CAACACCAC		TTACACCTAA	AGTCCGGGTC	CGGGCCGCGG	ATCGTTCTCG	TGTGGACTCT	TCGACTTGCA
2641 TGCTTCTGTG ACTTCGTTCT TTTTGTTTC AAGGGGTGAA AACCCCCTGT CAGAAGGTAC ACGAAGACAC TGAAGCAAGA AAAACAAAAG TTCCCCACTT TTGGGGGACA GTCTTCCATG CCTCGCATAT CCATGTGAAG CAGACGACTC CCTGCTTGCC GCACACACCT CGGACAGTGA GCAGCGTATA GGTACACTTC GTCTGCTGAG GGACGAACGG CGTGTGTGA CGAGCGTATA GGTACACTTC GTCTGCTGAG GGACGAACGG CGTGTGTGAG GCCTGTCACT 2761 GCAACCCAGG CTCTGCCGTG TTCAGACGTC GGCTACTCCG TGGCTCCACC TGACCTCCGA CGTTGGGTCC GAGACGGCAC AAGTCTGCAG CCGATGAGGC ACCGAGTGA CTGGCTCCGA CGTTGGGTCC GAGACGGCAC AAGTCTGCAC CGGTGAGGGC ACCGAGGTGA CTGGAGGGC 2821 ATGCTATTTG CTCCCAGGCC AGGACTGCAC TGTCTGGAGG GGCCAGAGAC CACAGGAGGAG TACGATAAAC GAGGGTCCGC TGGACGTGC CTGTTGGAGG GGCCAGAGAC CACAGGAGGAG CTAGAACGAG CTTAGGAGGG TACTCACCCC CAGACACTCC CCGTCTCTG GTGTCCTCT 2881 GTTCTTGCT GCATCCTCC ATGAGGGTG ACAGACCTCC CCGTCTCTG GTGTCCTCTC CAGAACCACG CTAGAGAGGG TACTCCCCACA CCGGTCAAGG GATCAAGACC GGTACGACG 2941 TGCTTGGTG CATTGGTAG GAATGGGACA CACGCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCAC GTAACCAATC CTTACCCTGT GTCCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGT TACATGTGA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCACGT 3061 CAGGTGACGA GAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAGGTA 3121 CTACTGGGG GCACATAGGT GAGTCTGCC CACTCAGAAG GAAACCATCC TCTTCCGT GATAGACCCC CGTGTATCCA CTCAGACGAG GTGACTCTC CTTCCGTATG AGAGGAAGTAC 3121 CTACTGGGG CACATAGGT GAGTCTCCC CCCCCCCC TCACTCAGAAG GAAGCATACC TCTCCCCTCA GATAGACCCC CGTGTATCCA CTCAGACGAG GTGACTCTC CTTCGGAACG AAGTCTCAC GATTACTACA AAGAAAATA TACATACACCT CCCCCCCC TCACTGAAC GAAGCCTTCCA TTCAAACCCT AGGTTCCATTA ATTTTGTGA GGGGAGGGG ACGCTGTAC TCTGCCACATA AGGTCCCCTT TATACTACA CTCAAGACGAG GAGACATAC TCTCACCATAG GAAGCCTTC CCTTTTATACA AAGAAAATAT AAGTAAAGGCA TATAAATTTC CTCCCCTATA TTTTAAAAACACCT CCCCTCCCC TCACTGTAC CTCCCACACA ACAAAACCTC CCGTTTTTT TTTTTTAA TTCATTCCGT ATATTTAAAG GAGGTCCTC GTTTAGAACA 3301 CCTTTTTACA AAGAAAATAT AATATTACA CCCTTCACCACAGA GAAACCCTTC CTTTAGAACA 3421 GAATTTTTAC CACGCCAG GCAGAGGGTT CAAAAAGACT CCTAAGA	2581	GAAGGTTGAA	GACTGATCCT	GAAGTGACGT	CCTGATGTCT	GCCCAGCAAC	CGACTCAACC
ACGAAGACAC TGAAGCAAGA AAAACAAAAG TTCCCCACTT TTGGGGGACA GTCTTCCATG 2701 CCTCGCATAT CCATGTGAAG CAGACGACTC CCTGCTTGCC GCACACACCT CGGACAGTGA GCAGCGTATA GGTACACTTC GTCTGCTGAG GGACGACACCG CGTGTGTGGA GCCTGTCACT 2761 GCAACCCAGG CTCTCCCGTG TTCAGACCTC GGCTACTCCG TGGCTCCACC TGACCTCCGA CCTTGGGTCC GAGACGGCA AAGTCTGCAG GGCTACAGC ACGAGGAGA CACGAGGAGA 2821 ATGCTATTTG CTCCCAGGCC AGCACTGCAC TGTCTGGAGG GGCAGAGAC CACGAGGAGA TACGATAAAC GAGGGTCCGG TGGTGACGT ACAGAACGC ACCGAGGAGAC CACGAGGAGA TACGATAAAC GAGGGTCCGG TGGTGACGTG ACAGACCTCC CCGTTCTTG GTGTCCTCTC 2881 GTTCTTGCCT GCATCCTCC ATGAGGGTT GACAGACCTCC CCGTTCTTG GTGTCCTCTC 2881 GTCTTGGTG CATTGGTTAG GAATGGGAC ACGCCCCCTT GTTGTGAAGA CGGTACGACG CAGAACCGC CTAGGAGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTG CATTGGTTAG GAATGGGAC ACGCCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCAC GTAACCAATC CTTACCCTG GTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGGC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTTA CATTACTTC AGTTCCAGGT GTCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGT ATGTCAACACT 3121 CTATCTGGG GCACATAGGT GAGTCTGCT CACTCAGAGA GAAGACTAC CTTTCAGGT GTCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCT CACTCAGAAG GAAGCATAC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGACGAG GTGAGTCTT CTTCGTATG GAGAAAGTCA 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAG GTGAGTCTT CTTCGTATG GAGAAGGTC 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAG GTGAGTCTT CTTCGTATG GAGAGAGGT 3241 GTCAAAAAAT TAAAACACCT CCCCTCCCC TCACTGTAC CTTCGGCAAC TGCGCCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGG AGTGACATC GAGCCGTT GCGCCAATC CAGTTTCTTA ATTTTTGTGGA GGGGAGGGG AGTGACATC GAGCCGTT GCCCAATC CAGTTTCTTA ATTTTTTTATA TTCATTCCT TATTTTAAA TACATCTTT TTTTTTTATAC TTCATTCA		CTTCCAACTT	CTGACTAGGA	CTTCACTGCA	GGACTACAGA	CGGGTCGTTG	GCTGAGTTGG
2701 CGTCGCATAT CCATGTGAAG CAGACGACTC CCTGCTTGCC GCACACACCT CGGACAGTGA GCAGCGTATA GGTACACTTC GTCTGCTGAG GGACGACGG CGTGTGTGAG GCCTGTCACT 2761 GCARCCCAGG CTCTGCCGTG TTCAGACGTC GGCTACTCCG TGGCTCACC TACCCCCC CGAGCGCGC GAGACGCCC CAGACGTGCAC CGTTGGGTCC GAGACGCACA AAGTCTGCAG CCCATGAGGC ACCGAGGTGA ACTGGAGGCT 2821 ATGCTATTG CTCCCAGGCC AGCACTGCAC TGTCTGGAG GGGCAGACAC CACAGGAGAG TACGATAAAC GAGGGTCCGG TCGTGACGTG ACCAGCCTCC CCCGTCTCTG GTGTCCTCTC 2881 GTCTTGCCT GCATCCTCCC ATGAGGGTG GCACAGCCTC CCCGTCTCTG GCATCCTCC CAAGAACGGA CGTAGGAGGG TACTCCCACA CCGGTCAGG GATCAAGACA CGGTACGACG 2841 TCCTTGGTG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAAGC CGGTACGACG ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGAA CACACACTTCA AATGTACCAT ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGC TGGGACACAC GTAATGAAG TCACACTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTCTGTA CATTACTTCC AGTGTCCAG GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTCTGTA CATTACTTCC AGTGTCCAGG 301 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACTG ATGTCCATAC CAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCAGAG GAAGCATACC CTCTCACTG GATAGACCCC CGTGTATCCA CTCAGACCAG GTGACTCTCAC AACGCTCTAC AGAGAAGTCA 3181 TCCAGGGGAC ACGAGGTACA TCCCAGGCAT CGGGGAACTG AACGCTCTACA CTCAAACCATT AGGTCCCCTG TGTCCCATG AGGGTCCGCCC TCACTTACA CCTTCAGAGGAT 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCCC TCACTGAC GAAGCCTTTAC AGGTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCCC TCACTGAC GAAGCCGTTG ACGGCGAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGG AGTGACATC GAAACCTTTAC GGAAATATGT TTCTTTTATA TTCATTCCGT ATTTTAAAA GAGGTCGTC CTTTAGAACA 3301 CCTTTATACA AAGAAAATAT AAGATAACCT TCCACCAGCAT GGAAACCTTCAA CAGTTTCTTA AAAAAAAATAT AAGATAAACCT TCCACCAGCAAC CACGGGATCA GGAAAAAAAAAAAAAAAAAAAAAAAAAAA	2641	TGCTTCTGTG	ACTTCGTTCT	TTTTGTTTTC	AAGGGGTGAA	AACCCCCTGT	CAGAAGGTAC
GCAGCGTATA GGTACACTTC GTCTGCTGAG GGACGAACGG CGTGTGTGA GCCTGTCACT 2761 GCAACCAGG CTCTGCCGTG TTCAGACGTC GGCTACTCCG TGGCTCACC TCACCTCCGA CGTTGGGTCC GAGACGGCAC AAGTCTGCAG CCGATGAGGC ACCGAGGTGG ACTGGAGGCT 2821 ATGCTATTTG CTCCCAGGCC ACGACTGCAC TGTCTGGAGG GGCAGAGAC CACAGGAGGG TACGATAAAC GAGGGTCCGG TCGTGACGTG ACAGACCTCC CCCGTCTCTG GTGTCCTCC 2881 GTTCTTGCCT GCATCCTCCC ATGAGGGTTG GCCAGTTCC CTAGTTCTGT GCCATCCTCC CAAGAACGAC GCTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG CAAGAACGAC GCTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTG CATTGGTTAC GAATGGGACA CACGCCCCTT GTTGTAAGT TTACATGTCA ACGAACCACC GTAACCAATC CTTACCCTGT GTGGGAGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACCACAT GTAATGAAGG TCACAGTCCA GGAAGAATA CCAATTCACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT GCCACTGTC TCTTTAGGTT TGACACTATA TGTCCACGGT ACTTCCATTCC AGTGTCAGGT GCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGGT ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGG GCACATAGGT GAGTCTGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA GATGAGCCC CGTGTATCCA CTCACACCAG GTGAGTCTC CTTCGTATAG GAAAGAAGTCA AGGTCCCCTT GTTCCCATGT AGGGTCGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA AGGTCCCCTT GTCCCATGT AGGGTCGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA AGGTCCCCTT GTCCCATGT AGGGTCGCTC CACTGTGAC TTCAGAGTTAA AGGTCCCCTT GTCCCATGT AGGGTCGCTC CACTGTAGC TTCGAGATG AAAGTTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGTAGC CTTCGGCAAC TCCCACATC CAGTTCTTAA ATTTTTGTGGA GGGGAGGGG AGTGACATCG GAACCCGTTA AAGTTCCTT CAGTTATACA AAGAAAATAT AAGTAAGGGA TATAAATTTC CTCCAGCAAG CAAATCTTT GGAAAATATGT TTCTTTTATA TTCATTCCGT ATTATTAAAG GAGGTCGTTC CTTTAGACACA 3301 CCTTTATACA AAGAAAAATAT AAGTAAGGGA TATAAATTTC CTCCAGCAAG CAAATCTTTT TTTTTTATACA TTAAAATTGT TGGAGAATATA AAAGTGCAT CCTTTAGAACA 3481 AAGCTCCACA GCATGGGGTC CGCTCCCCC GGTGCACTC CGTGCAGC CAAATCTCTT TTTTTTAACA TTAAAATTGT TGGAGAATATA TTCCATGGAAG GAACCCTTCAC CTTTAGAACA 3481 AAGCTCCACA GCATGGGGTC CGCTCCCCA GGTTCGACT CGTCCCAC GAACCCTCTAAAGGAAT CACAATACCGT 3481 AAGCTCCACA GCATGGGGTC CGCCCCTGGG GTTCCTCCC CGGTGCGAATC CACACGGAATC CACACGAATAC ATGAGAAG		ACGAAGACAC	TGAAGCAAGA	AAAACAAAAG	TTCCCCACTT	TTGGGGGACA	GTCTTCCATG
2761 GCAACCCAGG CTCTGCCGTG TTCAGACGTC GGCTACTCCG TGGCTCCACC TGACCTCCGA CCTTGGGTCC GAGACGGCAC AAGTCTGCAG CCGATGAGGC ACCGAGGTGG ACTGGAGGCT 2821 ATGCTATTTG CTCCCAGGCC AGCACTGCAC TGTCTGGAGG GGGCAGAGAC CACAGGAGAGA TACGATAAAC GAGGGTCCGG TGGTGACGTG ACAGACCTCC CCCGTCTCTG GTGTCCTCTC 2881 GTTCTTGCCT GCATCCTCCC ATGAGGGTG ACAGACCTCC CCCGTCTCTG GTGTCCTCC CAAGAACGGA GGTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGAGAAC CACACCTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGT TACATGTCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTTGTA CATTACTTCC AATGTCACGT 3061 CAGGTGACAA GAAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTAC CTCTTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAC TGTCCACGTG ATGTCCATAC GAGAAAGCAC 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCAGACGA GAAGCATTAC TCTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACACCG ATGCCACATAC GAGGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCAGACGA GAAGCATTAC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGACCAG GTGAGTCTTC CTTCGTATG GAGAGAGGTA 3181 TCCAGGGGGA CACAGGGTACA TCCCAGGCCAG GTGAGTCTTC CTTCGGAACCAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCCAGACGA AAGCTTCAC CAGTTTCTA ATTTTTGTGGA GGGGGAGGGG AGTGACATC CTCCGCCATG AAGCTTCAC CAGTTTATA AAAACACCT CCCCTCCCC TCACTGTAGC TTCCAGACGA AAGCTTTAC CAGTTTCTTA ATTTTTTTATA TTCATTCCGT ATATATAATTC CTCCAGCAACA CAAATCTTTG GGAAAATATGT TTCTTTTATA TACAATCCGT ATATATAAATTC CTCCAGCAACA CAAATCTTTT GGAAAAAAAAAAAAAAAAAAAAAAAAAAA	2701	CGTCGCATAT	CCATGTGAAG	CAGACGACTC	CCTGCTTGCC	GCACACACCT	CGGACAGTGA
CGTTGGGTCC GAGACGGCA AAGTCTGCAG CCGATGAGGC ACCGAGGTGG ACTGGAGGCT 2821 ATGCTATTTG CTCCCAGGCC ACCACTGCAC TGTCTGGAGG GGCAGAGAC CACAGGAGAG TACGATAAAC GAGGGTCCGG TCGTGACGTG ACAGACCTCC CCCGTCTCTG 2881 GTTCTTGCCT GCATCCTCC ATGAGGGTT GCCAGTTCC CTGGTTCTCT GCCATGCTGC CAAGAACCAC CGTAGCAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACACG CAAGAACCAC CTAGCAGAGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACACG 2941 TGCTTGGTGG CATTGGTTAG GAATGGGACA CACGCCCTT GTTGTAAGAC TTACATGTGA ACGAACCACC GTAACCAATC CTTACCCTTG TGTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTTGTGGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTTGTA CATTACTTCC AGTGTCAGGT 3061 CAGGTGACA GAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGCTA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCTC CACTCACAGA GAAGCATAC TCTSCCCTCA GATAGACCCC CGTGTATCA CTCAGACGAG GTGAGTCTC CTCTCGTATG AGAGAAGTCA 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAT CGGGGAACTC AAGCCTTCAC TTCAAACCAT AGGTCCCCTG TGTCCATGT AGGGTCCGTA GCCCCTTGAC TTCGAGAGG AGAGTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCCC TCACTCTAGC TTCGGACAC TGCCCCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGG AGTGACATC GAAGCCGTTG ACGCGGTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAC TGCCCCAATC CAGTTTCTTA TTCTTTTATA TTCATTCCGT TATATTAAAG GAGGTCCTC GAAATCCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT TATATTAAAG GAGGTCCT GAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCCT TATATTAAAG GAGGTCCT GATATCTGAC 3361 GGCTAAAAAA AAAAAATGTG AATTTTAACA ACCTCTATAT TTTCACTCTA TGTTTATGGCA CCCATTTTTT TTTTTTACA CTAAAAAGATT TATACCAGAGG TATATATAAAC GAGGTGTC GATATCCGAC 3481 AACCTCCACA GCAGGGTC CGTCCCCCC GAGCTTC TATGCTCAAC GAAATCCTGA 3561 GAAATTTAGT CACGCAGA GCAGAGGTC CAAAACTTTA TATAGGAGAGT CAAATCCTGA 3561 AACCTCCACA GCAGGGGTC CGTCCCCAG GGTTCTGATC TATGCCATAC GAAATCCTGA 3661 AACCTCCACA GCAGGGGTC CGTCCCCAG GGTTCTAAT TTCACCATAG GAAACCTTC CTCGTCCTCC CTCCCCCCC CAAGACTAA GCAGAGGAC CCCCTTGA 3661 AACCTCCACA GAGAGGTC CACCCTTAC CTAAGACTA AGAGGACT CCTCTCCCC CTCCTCCTCC CTCCCCCC CAACATTGACC TA		GCAGCGTATA	GGTACACTTC	GTCTGCTGAG	GGACGAACGG	CGTGTGTGGA	GCCTGTCACT
2821 ATGCTATTTG CTCCCAGGCC AGCACTGCAC TGTCTGGAGG GGGCAGAGAC CACAGGAGG TACGATAAAC GAGGGTCCGG TCGTGACGTG ACAGACCTCC CCCGTCTCTG GTGTCCTCC 2881 GTTCTTGCCT GCATCCTCCC ATGAGGGTGT GGCCAGTTCC CTAGTTCTCT GCCATGCTGC CAGGAACGGA CGTAGGAGGG TACTCCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTGG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAACT TACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGCC TGGGGGGAA CAACACTTCA AATGTACACT 3061 CAGGTGACA ACAAATCCAA ACTGTTGATT ACAGGTGCAC TGTATACTACC AGTGTCAGGT GCCACTGTC TCTTTAGGTT TGACAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCACAAG GAAGCATAC CTTCTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATC TCTTCCATG GATAGACCCC CGTGTATCCA CTCAGAACGA GTGAACCTTC CTTCGATAG GAAGCATACC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGAACGA GTGAGCTTTC CTTCGATAGG AGAGGAGT 3181 TCCAGGGGAC ACAGGGTACA TCCCAGACGAG GTGAGTCTTC CTTCGATAGG AGASGGAGT 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGTAC TTCGAAGAGG AAGTTTGGTA AGGTCCCTT TATTTTTGTGGA GGGGAGGGGG AGTGACATCC CTCCGCCATTCCA CTCAGACAGA GTGACACTCAC TTCCAACACAC CAGTTTCTTA ATTTTTGTGGA GGGGAGGGG AGTGACATCC GTCCGCCAATC CAGTTTCTTA AAGAAAATAT AAGAAACATA AAGTACACTC GAACCCGTTG ACCCGCTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAG CAAATCCTTG GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAAG GAGGCGTTT GTTTAGAACA 3361 GGGTAAAAAA AAAAAATAT AAGAAACAC ACCCTTAAT TTTCACCTGA CAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCACACAA AACAAACACT CTCAGAACCAGT CCCATTTATT TTTTTTACAC TTAAAATTGT TGGAAGAAT AAAAGTGAAT CACAATCCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGGAT ACCCTTAAT TTTCACCTCAC CTTAGAACCGT CTTAGAACCA GAACCCGT CTTAGAACCA CTTAGAAATCA GTCCACAAAAAGAAT ATTCCACACA ACAAAAGGAT ACCCACTATA TTTCACCACAC CACATTGCC CACAGTAAACTA CTCCACAG GAGAGGAG CCCCACTTAC CTCCACCAG GAGAGGAG CCCCACTTAC CTCCACCAG GAGAGGAG CCCCACTTAC CTCCACCAG GAGAGGAG CCCCCACTTAC CTCCACCAAACCAA	2761	GCAACCCAGG	CTCTGCCGTG	TTCAGACGTC	GGCTACTCCG	TGGCTCCACC	TGACCTCCGA
TACGATAAAC GAGGGTCCGG TCGTGACGTG ACAGACCTCC CCCGTCTCTG GTGTCCTCC 2881 GTTCTTGCCT GCATCCTCC ATGAGGGTGT GGCCAGTTCC CTAGTTCTGT GCCATGCTGC CAAGAACGGA CCTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA GGGTACCACG 2941 TGCTTGGTGG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTAAGT TACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT 3061 CAGGTGACA AGAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTCTAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCT CACTCACAGA GAACACTTCA AGAGAGTCA GATAGACCCC CGTGTATCA CTCAGACGAG GTGAGTCTC CTTCGATAG GAGAAAGTCA 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAT CGGGGAACTC AAGCCTTCAC TTCAAACCAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCAAGCAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCAAGCGTA AGGTCCCCTTG ACGCTTACA AGGTCCCTTCTTCATATACA ACAGACACT AGGTCCCCTTGAC CTCCAGCAGA GAACTTCTCTTCT		CGTTGGGTCC	GAGACGGCAC	AAGTCTGCAG	CCGATGAGGC	ACCGAGGTGG	ACTGGAGGCT
2881 GTTCTTGCCT GCATCCTCCC ATGAGGGTGT GGCCAGTTCC CTAGTTCTGT GCCATGCTGC CAAGAACGAC GGTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTGG CATTGGTTAG GAATGGACA CACCCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGG 3061 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTGCA TCACAGGTTCA GTCCACTGT TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATCA GAGAAATCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCAGAAG GAACCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCC CACTCAGAAG GAACCATAC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGACCAG GTGAGTCTTC CTTCGTATGG AGASGGGAGT 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAT GCGGGAACTG CTCTGGTATGG AGASGGGAGT 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTTGAC CTTCGGAAGT AACTTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGACC TTCGGAAGT AACTTTGGTA 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAC CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAGA GAGGCCGTT ACCGCGTATAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAC CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAGA GAGGTCGTTC GTTTAGAACA 3361 GGGTAAAAAA AAAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAC CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAGA GAGGTCGTT GTTTAGAACA 3361 GGGTAAAAAA AAAAAAATAT AAGTAAGGCA TATAAAATTT CTCCTCAACAA CAAAACCAT 3421 GAATTTTAGT CACCTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATT CTATAGCGA CCCATTTTTT TTTTTACAC CTAAAAAAGATT ATTCCAGAAG ATACCTCATC CTATAGCCAT CTTAAAAATCA GTGCAGGTT TGTTTTCTAA TAGGGTATTA AAAGTGACAT ACAATACCGT 3481 AAGCTCCACA GCATGGCGTC CGTCCCCA GGTTCCATAG CGAGGGAGT GCACGGTTAG CTTAAAAATCA GTGCAGGAT CAAAAAGATT ATTCCAGAAG ATACCTCATC CTATAGCCTGA CTTAAAAATCA GTGCAGGAT CAAAAGATT ATTCCAGAAG ATACCTCATC CTATAGCACT TCCGGTCTGT CCTCCCCAG GCAGAGGTC CAAAAGATTA AAGTCTCATA AGATCCGCTGA 3481 AAGCTCCACA GCAGGGGTC CGTCCCCAG GGAGGGGT CCAAGACTAG CAAGTTAG CTACCATAG GAAGCCCC TCCGTCCTGT CCTCCCCAG GCAGAGGTC CAAATGACCTC CAAGACTAA AGATGCAGT CAAGT	2821	ATGCTATTTG	CTCCCAGGCC	AGCACTGCAC	TGTCTGGAGG	GGGCAGAGAC	CACAGGAGAG
CAAGAACGGA CGTAGGAGGG TACTCCCACA CCGGTCAAGG GATCAAGACA CGGTACGACG 2941 TGCTTGGTGG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGGGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGGGCAAC CAACACTTCCA AATGTACCACT GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CAATTACTTCC AGTGTCAAGGT 3061 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTTCAGT GTCCACTGT TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTTGGTC CACTCAGAGA GAAGCATTACC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAAGACGAG GTGAGTTCC CTCTGTATGA AGAGGAGAT AGGTCCCCT GTCCCATGCT AGGGTCCCACTGAGAG GAAGCATTACC TCTACAGCAT AGGTCCCCTG TGTCCCATGT AGGGTCCCTA CCCCTTGAC TTCGAAGAGAG AAACTTTGGTA 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAT CGGGGAACTG AAGCCTCTCAC TTCAAACCAT AGGTCCCCTG TGTCCCATGT AGGGTCCCTA GCCCCTTGAC TTCGAAGAGT AAACTTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGTAGC CTTCGGCAAC TGCGCCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGGG AGTGACATCG GAAGCCGTTG ACCGGGTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCACGACA CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATAAATTTC CTCCACGACA CAAATCTTGT GGAAATATGT TCTTTTTATA TTCATTCCGT ATAAATTTC CTCCACGACA CAAATCCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCAAGA AACACTCATC CTTAGACCA CCCATTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCAAGGCA TTACAGGAACT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATC CTATGCCTGA CTTAAAAATCA GTGCAGGTT TGTTTTCTAA TAAAATTGT TGGAGATAC CGATGCAACC TTCCAGGGTGT CGTACCCAG GCAGAGGGTC CCAAGACTAC CGTCCCATAC TTCCAGGGTGT CGTACCCAG GCAGAGGGTC CCAAGACTAC CGAGAGGAGT GCCACCTTAG 3481 AGCTCCACA GCAGGGGTC CGTCCCCCG GGTTCTGATC CTCCTCCCC CGGTGCAATC TCCGGCCTGT CGTTCCCAG GCAGAGGGTC CAAGACTCC CAAGACTAC CTCCTCCTCC CTCCTCCCC CTCCCCC GGTCCCATAG GCAGAGGAC ACCCCATTAG AAGCTCCACA GAGACCCC TGAGCGTTC CTCATGACC AGATGGTAC TCCCTCAAGAC 3601 ATCAGAGCA GGAAGCCC TGAGCGCAC CCAATAACCT TAAAGAGAAC CCCAATAACCT TAAAACCT TCCAGAGGAAC ACACCTAAAAC ATCT		TACGATAAAC	GAGGGTCCGG	TCGTGACGTG	ACAGACCTCC	CCCGTCTCTG	GTGTCCTCTC
2941 TGCTTGGTGG CATTGGTTAG GAATGGGACA CACGCCCCTT GTTGTGAAGT TTACATGTGA ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTATA CATTACTTCC AGTGTCAGGT CAACACCAGG ACCCTGTATA CATTACTTCC AGTGTCAGGT GTCCACTGT TCTTTAGGTT TGACAACTAA ATGTCCACGT ATGTCCATCA GAGAAAGCCA ACACACTAA ATGTCCACGT ATGTCCATAC GAGAAAGCCA GAAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTTCAGT GTCCACTGT TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA GATAGACCCC CGTGTATCCA CTCAGACCAG GTGAGTCTT CTTCGATAG ACAGGAGACCC CGTGTATCCA CTCAGACCAG GTGAGTCTT CTTCGATAG ACAGCGAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCCAGACCAT AGGTCCCCCT GTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCCAGACCAT AGGTCCCCCT GTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCCAGACCAT AGGTTCCCATG AAGGTTTCTA ATTTTTGTGGA GGGGGAGGGG AGTGACATC GAAGCCGTTGA AGGTTCTCAACCAT CAGTTTCTA ATTTTTTGTGGA GGGGGAGGGG AGTGACATC GAAGCCGTTG ACGCGGTTAG CCCTTTATACA AAGAAAAATAT AAGTAAGCCA TATAAAATTC CTCCAGCAAG CAAATCTTGT GGAAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAAA GAGGCCGTTG ACGCGGTTAG CCCTTTTTTTTATA TTCATTCCGT ATATTTAAAAG GAGGTCGTT GTTTAGAACA ACCTCTATAT TTTCATCTGTA TGTTATGCGA CCCATTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT CCATTATATTAAAATAA GCCAGAGAATA ACAATACCGT ATAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT ACAATTACCGT ATAAAATAAA	2881	GTTCTTGCCT	GCATCCTCCC	ATGAGGGTGT	GGCCAGTTCC	CTAGTTCTGT	GCCATGCTGC
ACGAACCACC GTAACCAATC CTTACCCTGT GTGCGGGGAA CAACACTTCA AATGTACACT 3001 CCTTCTTATA GGTTAACTGA GTTTGTGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT 3061 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTCCAC TACAGGTATG CTCTTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGACGAG GTGAGTCTTC CTTCGTATGG AGASGGGAGT 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGACA GCCCCTTGAC TTCGAGAGT AAGCTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCGAGAGT AAGCTTCTCAC TTCAAACCAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCGAGAGT AAGCTTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCCC TCACTGTAGC CTTCGGCAAC TGCGCCAATC CAGTTTCTTA ATTTTGTGGA GGGGGGGGG AGTGACATCG GAAGCCGTTG ACGCGGTTAG 3301 CCTTATACA AAGAAAAATAT AAGTAAGGCA TATAAAATTTC CTCCAGCAAG CAAATCTTGT GGAAATATGT TTCTTTTATA TCCATTCCGT ATAAAATTTC CTCCAGCAAG CAAATCTTGT GGAAATATGT TTCTTTTATA TCATTCCGT ATAAAATTTA TTCACTGTA TGTTAAGACA 3361 GGGTAAAAAA AAAAAATGTG AATTTTAACA ACCTCTATAT TTTCACTGTA TGTTATGGCA CCCATTTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATCCAGAAG ATACCATC CTATGCCTGA CTTAAAAATCA GTGCAGGTT TGTTTTCTAA TAAGGTCTTC TATGGAGAGA GATACGGACT 3481 AAGCTCCACA GCATGCCGTC CGTCTCCCAG GGTTCGATC CCTCCTCCA CGGTGCAATC TTCGAGGTGT CGTACCGCAG GCAGAGGGTC CCAAGACTAG CAGAGGAGT GCCACGTTAG 3541 AGGCAGGACA GGAGGAGGTG CAGGGGTACC ACATTGACCC AGATGGTATC TCCTCCACC TCCGTCCTGT CCTCCCCAC GCCCCGATGG TGTAACCTAG GATACGGACT TCGAGCTGT CCTCCCCAC GCCGCATGG TGTAACCTAA ACAATCCCC TTCCCCAC GCTCCCACA GCAGGGGTC CAAGAGGAGT GCCACGTTAG 3601 ATTCAGACAT CCATAAGGAA TGCCAATGC TGTAACTTA TCTACCATAA AGGAGAGAG ATCCTCTTA GGGAACCC TGGGCCTTC CTGGGAACT CTAAGACTA ACACTGAAG ATCTCTTCGG TCCTCCCAC GTCCCGAAGG TGTAACCTA TCAAGGAAGT CACACTGAAG 3601 ATCAGACAC CCTAAGGAA TGCCAATGC TGTAACCTA TCAAGAGAAG CACCTGAAAG ATCTCTTCGG TCCTCTGGG ACCCC TGAGCCTTC CTGAGAACT CCAAGGAAGT CACACTGAAG ATCTCTTCGG TCCTCTGGG ACCCC TGAGCCTTC CTGAGAAGT CCCGGTTCA GT		CAAGAACGGA	CGTAGGAGGG	TACTCCCACA	CCGGTCAAGG	GATCAAGACA	CGGTACGACG
3001 CCTTCTTATA GGTTAACTGA GTTTGTGGCC TGGGACACAT GTAATGAAGG TCACAGTCCA GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT 3061 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATAC GAGAAAGTCA 3121 CTATCTGGGG GCACATAGGT GAGTCTGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA GATAGACCCC CGTGTATCA CTCAGACGAG GTGAGTCTTC CTTCGTATGG AGASGGAGT 3181 TCCAGGGGAC ACAGGGTACA TCCCAGACGAG GTGAGTCTTC CTTCGTATGG AGASGGAGT AGGTCCCCTG TGTCCCATGTA AGGGTCCGTA GCCCCTTGAC TTCGACAGTA AAGGTCCCCC TGTCCCATGA TTCCAAGCAT AGGTCCCCTG TGTCCCATGTA AGGGTCCGTA GCCCCTTGAC TTCGACAGTG AAGTTTGGTA 3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGTAGC CTTCGGCAAC TGCGCCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGG AGTGACATCG GAAGCCGTTG ACGCGGTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAG CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAAA GAGGTCGTTC GTTTAGAACA 3361 GGGTAAAAAA AAAAAATGTG AATTTTAAACA ACCTCTATAT TTTCATGTAT TGTTATGGCA CCCATTTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGGTGACAT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTGAT CTATGCCTGA CCCATTTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATC CTATGCCTGA CTTAAAATCA GTGCAGGGTT TGTTTTCTAA TAAGGTCTTC TATGGAGTAG GATACCGACT 3481 AAGCTCCACA GCATGGCGTC CGTCTCCCAG GGTTCTGATC CGTCTCCTCA CGGTGCAATC TTCGAGGTGT CGTACCGCAG GCAGAGGGTC CCAAGACTAG GCAGAGGAGT GCCACGTTAG 3541 AGGCAGGACA GGAGGAGGT CAGGGCTACC ACATTGACCC AGATGGTATC TCCTCTCACC TCCGTCCTGT CCTCCTCCAC GTCCCAATG TGTAACTGG TCTACCATAA AGGAGAGTGG 3601 ATTCAGACAT CCATAAGAAA TGCCAATACC TGTAAACTTA TCAAGAGGAC ACACTGAAAG ATCTCTTCG GTCTCTTAACGA TGCCAATAC CTTAAGAGAA TGCCAATAC CTAAGAGGAC ACACTGAAAG ATCTCTTCG AGGACACCCC TGAGCCTTTC CTGGGAACT CTAAAGAGGAC ACACTGAAAG ATCTCTTCGG TCCTGTGGGG ACTCCGAAGAGAAT CCCTAGAGAGAC ACACTGAAAG ATCTCTTCGG TCCTGTGGGG ACTCCGAAGAGAAT CCCCGTTCC GTGAGCTTCC ACAGGAACT CCAAGGAACT CACACGAAGA ATCTCTTCGG TCCTGTGGGA ACCCCTTTC CTGGGAACT CCCAAGGAACT CACACTGAAG ATCTCTTCGG TCCTG	2941	TGCTTGGTGG	CATTGGTTAG	GAATGGGACA	CACGCCCCTT	GTTGTGAAGT	TTACATGTGA
GGAAGAATAT CCAATTGACT CAAACACCGG ACCCTGTGTA CATTACTTCC AGTGTCAGGT 3061 CAGGTGACAG AGAAATCCAA ACTGTTGATT ACAGGTGCAC TACAGGTATG CTCTTTCAGT GTCCACTGTC TCTTTAGGTT TGACAACTAA TGTCCACGTG ATGTCCATC GAGAAAGTCA 3121 CTATCTGGGG GCACCATAGGT GAGTCTGCTC CACTCAGAAG GAAGCATACC TCTSCCCTCA GATAGACCCC CGTGTATCCA CTCAGACCGA GTGAGTCTTC CTTCGTATGG AGASGGGAGT 3181 TCCAGGGGAC ACAGGGTACA TCCCAGGCAT CGGGGAACTG AAGCTCTCAC TTCAAACCAT AGGTCCCCTG TGTCCCATGT AGGGTCCGTA GCCCCTTGAC TTCCAGACGA TCCCAGGCAT CCCCCTCCCC TCACTGTAGC CTTCGGAACTG AAGCTCTCAC CAGTTTCTTA ATTTTGTGGA GGGGAGGGGG AGTGACATC GAAGCCGTTG ACGCGCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGGG AGTGACATC GAAGCCGTTG ACGCGGTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAG CAAATCTTGT GGAAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAAG GAGGTCGTTC GTTTAGAACA 3361 GGGTAAAAAA AAAAAATGTG AATTTTAACA ACCTCTATAT TTTCACTGTA TGTTATGGCA CCCATTTTTT TTTTTTACAC TTAAAATTGT TGGAGATATA AAAGTGACAT ACAATACCGT 3421 GAATTTAGT CACGCCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATC CTAACACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATC CTATGCCTGA CTTAAAATCA GTCCAGATT TGTTTTCTAA TAAGGTCTTC TATGGAGTAG GATACCGCATC TTCGAGGTGT CGTACCGCAG GCAGAGGGTC CCAAGACTAG GCAGAGGAT CCCCAGTTAG 3541 AGGCCCACA GCATGGCGTC CGTCTCCCAG GGTTCTGATC CGTCTCCTCA CGGTGCAATC TTCGAGGTGT CGTACCGCAG GCAGAGGGTC CCAAGACTAG GCAGAGGAT CCCCCGTTAG 3541 AGGCAGGACA GGAGGAGGT CAGGGCTAC ACATTCACCC AGATGGTATC TCCTCCACC TCCGTCCTGT CCTCCTCCAC GTCCCCAGTG TGTAACTGGG TCTACCATAG GCAGAGGTGG 3601 ATCAGACAC CCATAAGGAA TGCCAAATGC TGTATTGAAT AGTTCTCCTT TGTGACTTTC TAAGTCTTGTA GGTATTCCTT ACGGTTTAC TGTATTGAAA AGTTCTCCTT TGTGACTTTC TAAGTCTTGTA GGTATTCCTT ACGGTTTAC CTGGGAACT CCAAGACTAC ACACTGAAAG 3661 TAGAGAAGCC AGGACACCC TGAGCCTTTC CTGGGAACT CCAAGAGATA CACACGAAAG ACCCCTTGAG GACACCCC TGAGCCTTTC CTGGGAACT CCAAGAGATA CACACGAAAGT ACCCCTTGGGGG ACTCGGAAAG GACCCTTGAG GATTCCTTCA GTGTCCAAGT ACCCCTTGGGGG ACTCCCAAGACAT CCCGGAAAG GACCCTTGAG GATTCCTTCA GTGTCCAAGT		ACGAACCACC	GTAACCAATC	CTTACCCTGT	GTGCGGGGAA	CAACACTTCA	AATGTACACT
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3241 GTCAAAGAAT TAAAACACCT CCCCTCCCC TCACTGTAGC CTTCGGCAAC TGCGCCAATC CAGTTTCTTA ATTTTGTGGA GGGGAGGGG AGTGACATCG GAAGCCGTTG ACGCGGTTAG 3301 CCTTTATACA AAGAAAATAT AAGTAAGGCA TATAAATTTC CTCCAGCAAG CAAATCTTGT GGAAATATGT TTCTTTTATA TTCATTCCGT ATATTTAAAG GAGGTCGTTC GTTTAGAACA 3361 GGGTAAAAAA AAAAAATGTG AATTTTAACA ACCTCTATAT TTTCACTGTA TGTTATGGCA CCCATTTTTT TTTTTTACAC TTAAAATTGT TGGAGAATATA AAAGTGACAT ACAATACCGT 3421 GAATTTTAGT CACGTCCAAA ACAAAAGATT ATTCCAGAAG ATACCTCATC CTATGCCTGA CTTAAAATCA GTGCAGGTTT TGTTTTCTAA TAAGGTCTTC TATGGAGATG GATACGGACT 3481 AAGCTCCACA GCATGGCGTC CGTCTCCCAG GGTTCTGATC CGTCTCCTCA CGGTGCAATC TTCGAGGTGT CGTACCGCAG GCAGAGGGTC CCAAGACTAG GCAGAGGAGT GCCACGTTAG 3541 AGGCAGGACA GGAGGAGGTG CAGGGCTACC ACATTGACCC AGATGGTATC TCCTCTCACC TCCGTCCTGT CCTCCTCCAC GTCCCGATGG TGTAACTGG TCTACCATAG AGGAGAGTGG 3601 ATTCAGACAT CCATAAGGAA TGCCAAATGC TGTATTGAAT AGTTCTCCTG TGTGACTTTC TAAGTCTGTA GGTATTCCTT ACGGTTTACG ACATAACTTA TCAAGAGGAC ACACTGAAAG 3661 TAGAGAAGCC AGGACACCCC TGAGCCTTC CTGGGAACTC CTAAGGAAGT CACAGGTTCA ATCTCTTCGG TCCTGTGGGG ACTCGGAAAG GACCCTTGAG GATTCCTTCA GTGTCCAAGT 3721 CACCGTGGGG ATTTTCAGGA TAGCATGGAG ACCAGAGAAT CCCGGTTCGG TTGTTCTCAC	3181						
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3721 CACCGTGGGG ATTTTCAGGA TAGCATGGAG ACCAGAGAAT CCCGGTTCGG TTGTTCTCAC	3661						
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GIGGUACCCC TAAAAGTCCT ATCGIACCIC TGGTCTCTTA GGGCCAAGCC AACAAGAGTG	3721						
		GIGGCACCCC	TAAAAGTCCT	ATCGTACCTC	IGGICICITA	GGGCCAAGCC	MACAAGAGIG



Titl: Gen Necessary for Striatal Function... Inventor(s): Robertson, t al. Application No.: 10/659,770 Docket No.: 2817/102 Page 34 of 37

AGCACTCGG AACTCTCCT TCTCTGACTG GTCTTTGTA GTGAGACCT CACTCAGCAC TCTGGCAGGAGCACTCCT TCTCTGACTG GTCTTTGTA GTGAGTCGT AGACCGTCCTCT TATGAAATTC TACTTAGAAAT CCCTATCTAA AACTATGTG GTTATGGTAT TTGATACACC CAATACCATG GTGTGTCCTC GAACCGTAAA CCTTTCAGAAA CCCTATCTAA AACTATGTG GTTATGGTAT GCAAAGTCTA TTGATACACC CAATACCACG GTGTGTCCTC GAACCGTAAA CACTGTACACA CACTGTAAAA CACTAGAGG AACTGGGTGCTCT AAACTACGCCT GAACCGTAAA CACTGTACACA CACTGTAACAC CTGTACATGA GAACTTCCCCA TGGGCTTCTAAAACATCGCCT CACCCGACTT GTGACAATTGT GACATGTAC CTACACAGGG AACGTGGAGAAACATCGCCT TTTACAGGTG GACAGTGTACT CACCCGACTA TTTACAGTGG TAGGAGGAGG GACGACACAC GACCGAGAAACACAC CTACACACACAC TTTACAGTGG TAGGAGGAGG GACGACACAC GACCGAGAAACACAC CTGTACACACACACACACACACACACACACACACACACAC	
AGCCACTCGG AACTCTTCCT TCTCTGACTG GTCTTTGTAA GTGAGTCGT AGACCGTCCT 3841 GCAGGAGAAG ATACTTTAAG ATGATCTTT GGGATAGATT TTGATACACC CAATACCATA GTCCTCTCT TATGAAATTC TACTTAGAAAA CCCTATCTAA AACTATGTGG GTTATGGTAT 3901 CACACAGGAG CTTGGCATTT GCAAAGTCTA TTCAGTTTCC TTCCACACTC TGACCCACGG GTGTGTCCTC GAACCGTAAA CGTTTCAGAT AAGTCAAAGG AAGGTGTGG ACTGGGTGCCA 3961 TTGTAGCGGG GTGGGCTGAA CACTGTAACA CTGTACATGC GATTTCCCCA TGGGCTCCTA AACATCGCCT CACCCGACTT GTGACATTGT GACATGTACG CTAAAGGGGT ACCCGAAGGAT 4021 AAATGTCACC ATCCCCC CTGCTGTGTC CTACTCCATT TACTGGTTAC AAGGTGATGC TTTACAGTGG TAGAGGAGGG GACGACACA GATCAGGTAA ATGACCAATG TTCCACTACT 4081 CAACAAGAGA AGCTATCACA ACACCAGGGC TGTGCACACCA TGTATGCACA GTTGTTCTCT TCCATAGTCT TGTGGTCCCG ACACGTGTGC ACGTGTGTT ACATACGTGC 4141 AGCACACAGA TGTATGTACA GCACACACA ACACCACAC CCCAAAAGGG GAGAAAAGGG TCGTGTGTCT ACATACATG CGTGTGTGT TGTGTGTGTG GGGTTTTCCT CTCTTTCCC 4201 AGAAAACATT TATAAAAAGC GACACACAC ACACACACAC CCCAAAAAGGA GAGAAAAAGGACA TCCTTTTGTAA ATATTTTCG CTGTCGATGG GGGTATAAGT TTTTACAAG AAAAAGGGACA 4261 AGGGAAACAG GTAGCTCCC ATAAGGAAAT TATCATGAGT GTGTTCCCC ATCACGTGCACACCA TGCCACACACACACACACACACACACACACACACACACAC	
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TIGTGTCCCC GAACCGTAAA CGTTTCAGAT AAGTCAAAGG AAGGTGTAGA ACTGGGTGCCC 3961 TTGTAGCGGA GTGGGCTGAA CACTGTAACA CTGTACATGC GATTTCCCCA TGGGCTTCTI AACATCGCCT CACCCGACTT GTGACATTGT GACATGTACG CTAAAGGGGT ACCCGAAGA' 4021 AAATGTCACC ATCTCCTCCC CTGCTGTGC CTACTCCATT TACTGGTTAC AAGGTGATG' TTTACAGTGG TAGAGGAGGG GACGACACAG GATGAGGTAA ATGACCAATG TTCCACTACI 4081 CAACAAGAGA AGCTATCACA ACACCAGGGC TGTGCACACG TGCACACACA TGTATGCACI GTTGTTCTCT TCGATAGTGT TGTGGTCCCG ACACGTGTGC ACGTGTGT ACATACGTG' 4141 AGCACACAGA TGTATGTACA GCACACACAC ACACACACAC CCCAAAAGGA GAGAAAAGGG TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGTG GGGTTTTCCC CTCTTTTCC' 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTG' TCTTTTTGTAA ATATTTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACC 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGT' 4321 TCTCCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGGCG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCCG TAAGCTAGGT GTGTTTAACT AGAAGATAGT TCTTTGGAATC TGAATTGCA CGTTTTTCCG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCCGAAGGCAT GACCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTTA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAAGGGTATA AAAGGACCCT GGCCGTAC 4501 ATTCTGTCAC CAAAGGGTATA AAAGGACCCT GGCATTGGAA AACCTTTGAC GGCCGTTTTAACGT CCGCAAGGCAT GACCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAAGGGTATA AAAGGACCCT GGCATTGGAAACCTTTGAC GGCCGTAC 4501 ATTCTGTCAC CAAAGGGTATA AAAGGACCCT GGCATTGGAAACCTTTGAC GGCCTTTTTAACCT AAAGGACCCT GGCACTTTTAACCT AAAGGACCCT GGCATTTTAACCT AAAGGACCCT GGCACTTTAACCT AAAGGACCCT GGCAATTT AAAGGCCCT GGCACTTTAACCT AAAGGACCCT GGCCGTAC CCCCCACGAGATT AAAGGACCCT GGCACTTTAACCT CCGAAGGCAT GACCCGTAC CTCCCCTCCTCC GTACCTCTC CTGGCAAATT AAAGTCCGTAA AACCTTTGAC GGCACTTTTTAACT AAACCCTTAGAC GGCCTTTTTAACCT AAAGGACCCT GGCACTTTTAAC	}
3961 TTGTAGCGGA GTGGGCTGAA CACTGTAACA CTGTACATGC GATTTCCCCA TGGGCTTCTAAACATCGCCT CACCCGACTT GTGACATTGT GACATGTAGG CTAAAGGGGT ACCCGAAGACACACACACACACACACACACACACACACA	;
AACATCGCCT CACCCGACTT GTGACATTGT GACATGTACG CTAAAGGGGT ACCCGAAGA: 4021 AAATGTCACC ATCTCCTCC CTGCTGTCT CTACTCCATT TACTGGTTAC AAGGTGATG: TTTACAGTGG TAGAGGAGG GACGACACG GATGAGGTAA ATGACCAATG TTCCACTACA 4081 CAACAAGAGA AGCTATCACA ACACCAGGGC TGTGCACACAC TGTATGCACA GTTGTTCTCT TCGATAGTGT TGTGGTCCCG ACACGTGTGC ACGTGTGTG ACATACGTG' 4141 AGCACACAGA TGTATGTACA GCACACACAC ACACACACAC CCCAAAAGGA GAGAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTG TGTGTGTGTG GGGTTTTCCT CTCTTTTCCC 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTG' TCTTTTGTAA ATATTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGAC 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTG 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC CCCCAGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG CCGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT TCTTGGAATC TGAATTGCA 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GACCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCCTATGAC GGACTGTTT	1
4021 AAATGTCACC ATCTCCTCCC CTGCTGTGTC CTACTCCATT TACTGGTTAC AAGGTGATGT TTTACAGTGG TAGAGGAGGG GACGACACAG GATGAGGTAA ATGACCAATG TTCCACTACA 4081 CAACAAGAGA AGCTATCACA ACACCAGGC TGTGCACACCA TGTATGCACA GTTGTTCTCT TCGATAGTGT TGTGGTCCCG ACACGTGTGC ACGTGTGTG ACATACGTG 4141 AGCACACAGA TGTATGTACA GCACACACA ACACACACA CCCAAAAAGGA GAGAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGTG GGGTTTTCCT CTCTTTTCCC 4201 AGAAAACATT TATAAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTG TCTTTTTGTAA ATATTTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACA 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTG 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT CCGAAGGCGT TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT CCGAAGGCAT GAGCGCATG 4441 GGAGGACAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	1
TTTACAGTGG TAGAGGAGGG GACGACACAG GATGAGGTAA ATGACCAATG TTCCACTACA 4081 CAACAAGAGA AGCTATCACA ACACCAGGGC TGTGCACACG TGCACACCAC TGTATGCACAC GTTGTTCTCT TCGATAGTGT TGTGGTCCCG ACACGTGTGC ACGTGTGGT ACATACGTGT 4141 AGCACACAGA TGTATGTACA GCACACACAC ACACACACAC CCCAAAAGGA GAGAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGTG GGGTTTTCCT CTCTTTTCCCT 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTGTCTTTTTTTTTT	
4081 CAACAAGAGA AGCTATCACA ACACCAGGGC TGTGCACACG TGCACACACA TGTATGCACAC GTTGTTCTCT TCGATAGTGT TGTGTGCCCG ACACGTGTGC ACGTGTGTT ACATACGTGT 4141 AGCACACAGA TGTATGTACA GCACACACAC CCCAAAAGGA GAGAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGTG GGGTTTTCCT 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTGT TCTTTTGTAA ATATTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACAC 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGT 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	1
4141 AGCACACAGA TGTATGTACA GCACACACC ACACACACC CCCAAAAGGA GAGAAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGT GGGTTTTCCT 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCTGTCTTTTTTTTTT	4
4141 AGCACAGA TGTATGTACA GCACACACAC ACACACAC CCCAAAAGGA GAGAAAAGGA TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGT GGGTTTTCCT CTCTTTTCCT 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTGT TCTTTTGTAA ATATTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACA 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC	
TCGTGTGTCT ACATACATGT CGTGTGTGT TGTGTGTGT GGGTTTTCCT CTCTTTTCCT 4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTGT TCTTTTGTAA ATATTTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACC 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGT 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC. AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	4
4201 AGAAAACATT TATAAAAAGC GACAGCTACC CCCATATTCA AAAATAGTTC TTTTCCCTG TCTTTTGTAA ATATTTTCG CTGTCGATGG GGGTATAAGT TTTTATCAAG AAAAGGGACC 4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACGC 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	<u>י</u>
4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAC TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTC AAGAGGGTCC CACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC	ŗ
4261 AGGGAAACAG GTAGCTCTCC ATAAGGAAAT TATCATGAGT GTGTTCTCCC ATCAGTGCAGTCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTGCAGAGAGG TAGTCACGTGCAGAGAGGG TAGTCACGTGCAGAGAGGGTCC CACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	A
TCCCTTTGTC CATCGAGAGG TATTCCTTTA ATAGTACTCA CACAAGAGGG TAGTCACGTT 4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC. AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	2
4321 TTCTCCCAGG GGTGCTCACT GAAGCTGGTC CACGTCTATA AACAGGTGAC ACTGGCTGC. AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC	3
AAGAGGGTCC CCACGAGTGA CTTCGACCAG GTGCAGATAT TTGTCCACTG TGACCGACG 4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	Ą
4381 GCAAAAAGCC ATTCGATCCA CACAAATTGA TCTTCTATCA TCTTGGAATC TGAATTGCA CGTTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	Γ
CGTTTTCGG TAAGCTAGGT GTGTTTAACT AGAAGATAGT AGAACCTTAG ACTTAACGT 4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	3
4441 GGAGGAGCAG CATGTAAGAC GACCGTTTAA TTCAGGCATT CCGAAGGCAT GAGCGCATG CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	С
CCTCCTCGTC GTACATTCTG CTGGCAAATT AAGTCCGTAA GGCTTCCGTA CTCGCGTAC 4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	
4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT GGCATTGGGA AACCTATGAC GGACTGTTT	С
4501 ATTCTGTCAC CAAGCGTATA AAAGGACCCT COCHTTGGGH 1210	T
TAAGACAGTG GTTCGCATAT TTTCCTGGGA CCGTAACCCT TTGGATACTG CCTGACAAA	A
TOTAL THE TRANSPORT OF	T
4561 TGCTGTAGAA GTAGGGATTT TACAGAAGTC ICCTIGGATT IGCCCTGCCT GGGGATTT ACGACATCTT CATCCCTAAA ATGTCTTCAG AGGAACCTAA ACGGGACGGA CCCCGTCAA	A
THE PROPERTY OF THE PROPERTY O	T
4621 TGCAGAGGAA CCTGCCAGAG ATTTATTGGC TGGTCAGTCT CTTGTGAAAT AGTATCATAGTAC ACGTCTCCTT GGACGGTCTC TAAATAACCG ACCAGTCAGA GAACACTTTA TCATAGTAC	A
TOTAL	C
4681 GAGAAACAGT TTGTAGAAAA AAACTATACC TGGGAAGACC TTTGCAACAT TGTTCCTTC CTCTTTGTCA AACATCTTTT TTTGATATGG ACCCTTCTGG AAACGTTGTA ACAAGGAAG	G
CACCAMANA MCTCCCCCA ATAAACTAGG CCAGGATAC	A
4741 ATGGGCCAAG ACTCAGTTAG GAGGCATAAA TCTGCCCGGA ATAMACTAGG TACCCGGTTC TGAGTCAATC CTCCGTATTT AGACGGGCCT TATTTGATCC GGTCCTATG	T
TACCCGGTTC TGAGTCAATC CICCGTATTT AGACGGGGC CCAGGATTGG TTTTTTTTGT	G
4801 GCCATGTTTA GTTAATAATT TGGTTTTAGA ATTCACACAG GCAGGATTGG TTTTTTTGT CGGTACAAAAT CAATTATTAA ACCAAAATCT TAAGTGTGTC CGTCCTAACC AAAAAAACA	.c
CGGTACAAAT CAATTATTAA ACCAAAATCI TAAGIGIGIC CGTCCCTCT TAGCTTTTC	C
4861 TCTTGGCAAG TGGAGCATAT TTAACATACA GGCATGGGAA TCCTGCCTCT TAGCTTTTC	G
AGAACCGTTC ACCTCGTATA AATTGTATGT CCGTACCCTT AGGACGGAGA ATCGAAAAG	- 'G
4921 CACCCTCTTG TCTCACCAAG TTTTTTCTCT CCAAAGGTTT CCAGGAATTT CTCATTAAT	.C
GTGGGAGAAC AGAGTGGTTC AAAAAAGAGA GGTTTCCAAA GGTCCTTAAA GAGTAATTA	<u></u>
4981 GCTGATGCAA ACTTAGTGAA TAATAATGAA TATAAACAAT GCTCACCTCA CCAAAATTA	, <u>v</u>
CGACTACGTT TGAATCACTT ATTATTACTT ATATTTGTTA CGAGTGGAGT GGTTTTAAT	<u> </u>



Title: Gen Necessary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 35 of 37

5041	ATTATTTGCA	GTCATTTGTG	ATAACACAAA	TTTTATCGCA	ATGGTTATTA	TTTAATTTGT
	TAATAAACGT	CAGTAAACAC	TATTGTGTTT	AAAATAGCGT	TACCAATAAT	AAATTAAACA
5101	CCCCACACAC	TGTGGTTATC	TTTTGTTGTG	GTTGTTTCTG	AGAAAATGTT	CTTGGATATG
	CCGCTGTGTG	ACACCAATAG	AAAACAACAC	CAACAAAGAC	TCTTTTACAA	GAACCTATAC
	TARCTCCCAA	TACCAGTGTG	AAGTATTGAT	CCCGGGCAGC	AAAATACAGC	CTAAGGTTTG
	ATTCACCCTT	ATGGTCACAC	TTCATAACTA	GGGCCCGTCG	TTTTATGTCG	GATTCCAAAC
	MITCHCOOT!	TTCTATCTCA	GTTCATCAGA	GGGCCTGAGA	AGCTGCGGGG	CAGTGTAAAG
5221	TAAACATCAA	AAGATAGAGT	CAAGTAGTCT	CCCGGACTCT	TCGACGCCCC	GTCACATTTC
	AIIIGIAGII	TGGGCTGGTG	CTCCTCACCC	TCCCCTTGCC	AAGAAGAGAG	CAATTGAATC
5281	TAAAGTATGC	ACCCGACCAC	CACCAGTCGG	AGGGGAACGG	TTCTTCTCTC	GTTAACTTAG
	ATTTCATACG	CTCCCTCCAC	CACCHENACAC	TCACCACTEC	TEGCCCGACG	GATCGCTGAG
5341	CTGTCCCCAG	GAGGGAGGTG	CCCACTTCTC	ACTGGTCACG	ACCGGGCTGC	CTAGCGACTC
	GACAGGGGTC	GAGGGAGGTG	CGGACTICIC	ACTOGICACO	CACCTCTTTA	CTCTCCCTCT
5401	ATATTCTCCC	ATAATGGCAA	AAAAATAGGC	AGTTTGATGT	CTCCACAAAT	CACACCGAGA
	TATAAGAGGG	TATTACCGTT	TTTTTATCCG	TCAAACTACA	CIGGACAAAI	moncomorner.
5461	CCTCTTTTGA	GCATGTGTTA	GCATTTTAT	TTTATACTCA	TCCAGTGAAC	ACACCACAAC
	GGAGAAAACT	CGTACACAAT	CGTAAAAATA	AAATATGAGT	AGGTCACTIG	AGACGAGAAG
5521	CAAGTGTGTT	CATGTATGTG	CTAGATATAT	TAGCACAGCC	TGCCTTCTGC	TGCACAACGC
	GTTCACACAA	GTACATACAC	GATCTATATA	ATCGTGTCGG	ACGGAAGACG	ACGTGTTGCG
5581	CTTAGAGACC	CGGCCTTTCA	ATGAGCTTAG	CTTGTGCTCT	GTTTCTGCTC	TCTTAGGTCT
	GAATCTCTGG	GCCGGAAAGT	TACTCGAATC	GAACACGAGA	CAAAGACGAG	AGAATCCAGA
5641	AAACTATGGT	GTCAGTTTTA	ATAGAACAAA	AGTATGCATC	TTGCCTTGGC	TTGAGCCTTT
	TTTGATACCA	CAGTCAAAAT	TATCTTGTTT	TCATACGTAG	AACGGAACCG	AACTCGGAAA
5701	TCGTTTTCAA	TGCTGACTTC	TCCCCTTTCT	CTCCTGTGCT	CACCTTACCT	TTCCAGAGTG
0.01	AGCAAAAGTT	ACGACTGAAG	AGGGGAAAGA	GAGGACACGA	GTGGAATGGA	AAGGTCTCAC
5761	TAAGGGACAA	CTTTTAAGGA	GGCGTGTCCC	TGGTAGGGGC	ATCCCTGTTC	ACCAGGTGCC
3,01	ATTCCCTGTT	GAAAATTCCT	CCGCACAGGG	ACCATCCCCG	TAGGGACAAG	TGGTCCACGG
5821	TCTCATCACC	CCACTTGACT	GACATCTACC	CTGGTGACTA	TGGGTTCCTC	TTGTTTGTAG
3021	ACAGTAGTGG	GGTGAACTGA	CTGTAGATGG	GACCACTGAT	ACCCAAGGAG	AACAAACATC
5001	CCAACCCTCC	CTCCACGTGG	AGGCATCAAT	CTGTTGGGTT	CTGGTTCCCG	GCTGCCTTTG
5881	CCTTCCCACC	CACCTCCACC	TCCGTAGTTA	GACAACCCAA	GACCAAGGGC	CGACGGAAAC
	CCTTGCCACC	, MCMCTTCTCT	CTATATTCCT	ACCCTGCATT	TGCTTTGTGT	GGTGCTGATG
5941	GTTTTGAAAG	, TCTCTTCTCT	CATATAAGGA	TGGGACGTAA	ACGAAACACA	CCACGACTAC
	CAAAACIIIC	AGAGAAGAGA	ATCACTCTCC	ATCAGTCACA	GACTCCCCCT	GTTGCAAAGT
6001	CTGTGGCAGT	AGGATCTTGG	TACTGAGAGG	TAGTCAGTGT	CTGAGGGGG	CAACGTTTCA
	GACACCGTCF	TCCTAGAACC	TACTORONOU	CTCACTCACT	CACACACAGO	CTGTCAGCCA
6061	GTCAGGCTGA	A CTCGACAGTC	HCCCARRERA	CIGAGICACI	СТСТСТСТСТС	GACAGTCGGT
	CAGTCCGACT	GAGCTGTCAG	IGGCAITITA	GACTCAGTCA	mmmcmcmmcc	T TOCCTCCCTC
6121	CGGCTTCCAC	C TTGCATGGCI	ATTCTATTTT	CACACGTGAG	, TIICIGIIG	TGGCTGGCTG
	GCCGAAGGT	AACGTACCGA	TAAGATAAAA	GIGIGCACIC	AMAGACAAC	ACCGACCGAC
6181	ACTGGCATTA	A TCTATGCTAP	GTTGAAATCA	GGAGTGTGCC	CAGCAGAGC	CATCATTCTC
	TGACCGTAA	r AGATACGATI	CAACTTTAGT	CCTCACACGG	GTCGTCTCGC	GTAGTAAGAG
6241	ACTGTCTTT	AAACAAAGC	GTACGGTTTG	ATCGATGAAC	GTATTTAAA	G CATTTCATGC C GTAAAGTACG
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Title: Gene Nec ssary for Striatal Function... Inventor(s): Robertson, et al. Application No.: 10/659,770 Docket No.: 2817/102 Page 36 of 37

BINE							
6301	AATGACAAAG	TGCTCAGTAG	TGGAAGGCAG	GCTGTGACCA	GTCTGCCTGC	TCCTTACTAT	
	TTACTGTTTC	ACGAGTCATC	ACCTTCCGTC	CGACACTGGT	CAGACGGACG	AGGAATGATA	
6361	AATTCTCAGG	ATTTGTTACT	GGAACAGTAC	ATGGAGGCCT	GACCTTGTGG	GGGCACAGGG	
	TTAACACTCC	TAAACAATGA	CCTTGTCATG	TACCTCCGGA	CTGGAACACC	CCCGTGTCCC	
	ΤΕΕΛ ΛΕΕΤΤΑ	CCTGAATATA	GTGTGTGTCT	CAAGAGGAAG	TCAGGGTACT	AGCTCAGTGC	
0421	ACCTTGGAAT	CGACTTATAT	CACACACAGA	GTTCTCCTTC	AGTCCCATGA	TCGAGTCACG	
6481	ΨC λ λ ΨC ΨC C Δ	GGTACTATAT	ATACATTTGC	CCGTTTTATC	TCTAATGTGA	AATAAATCCC	
	AGTTAGAGGT	CCATGATATA	TATGTAAACG	GGCAAAATAG	AGATTACACT	TTATTTAGGG	
6541	CANACACTTG	TTTATCGTGT	AGCGTACCTA	AAAGACTATT	CTATTATGGG	TGTCCCCACT	
	GTTTGTGAAC	AAATAGCACA	TCGCATGGAT	TTTCTGATAA	GATAATACCC	ACAGGGGTGA	
6601	TTCTTCCTTT	GGTCACCCCG	ATCCCCCGGT	CTTCTGCTGT	ATCTAGAACA	GTGACTATAA	
6601	DAGAACCAAA	CCAGTGGGGC	TAGGGGGCCA	GAAGACGACA	TAGATCTTGT	CACTGATATT	
CCC1	ARCATCEATT.	CCAATAGTGT	TTCCATATGA	TCTGTTGTCT	GGAGTATATG	CTACATGTTC	
6661	TACTACATAC	CCTTATCACA	AAGGTATACT	AGACAACAGA	CCTCATATAC	GATGTACAAG	
6701	TUCTUCUTUC	CAAAAACCCA	GTGCAGCTGA	TGATGCAAAG	CAGTCTCTCT	CTGTGTACAG	
6721	ATTTACTGIA	CHARARCCCA	CACGTCGACT	ACTACGTTTC	GTCAGAGAGA	GACACATGTC	
	TARATGACAT	DEMENA A A A A T	CACGTACAAN	CCCAGAACAC	TGTGAAACAC	TTAACATAAG	
6781	TGCCCCACCT	ATTTAAAAA	GTGCATGTTN	GGGTCTTGTG	ACACTTTGTG	AATTGTATTC	
	ACGGGGTGGA	TAMATITITA	TTCTTTCCAA	CCACAGCAGC	TTTCTCCACA	GGAACACAGT	
6841	AAACAAACGC	AGCGTCTGGA	AAGAAAGGTT	CCTCTCGTCG	AAAGAGGTGT	CCTTGTGTCA	
	TTTGTTTGCG	TCGCAGACCI	ATCCACACCC	ACCCAAGACA	CCTCAGAGGC	CATAGGGACA	
6901	AACAAAAGAG	GTCCGCCGCC	TAGGTGTGGG	TCGGTTCTGT	GGAGTCTCCG	GTATCCCTGT	
	TTGTTTTCTC	CAGGCGGCGG	CECCECCACC	ACCCCACAGG	TCCCAGCAAC	TGATCCTCAG	
6961	ACCTCCTTGC	TGGCCAACAC	CTGCTGGAGC	TCCCCTCTCCC	AGGGTCGTTG	TGATCCTCAG ACTAGGAGTC	
	TGGAGGAACG	ACCGGTTGTG	GACGACCICG	COMCOCOTOTO	CAACGCAAA	GAAANNTTTC	
7021	TGGATGGGTC	CGCAGTCAAA	GCCTTAATGG	GCTCTCTTTT	CTTCCCCTTT	GAAANNTTTC	
	ACCTACCCAG	GCGTCAGTTT	CGGAATTACC	CGAGAGAGAAAA	TANA TET CCCA	CTTTNNAAAG	
7081	AAGCTTATGA	TATCCAACAT	TATTATAGTT	GATGAGTTAG	TAMATICCGA TAMATICCGA	AAAAAAAAAGA	
	TTCGAATACT	ATAGGTTGTA	ATAATATCAA	CTACTCAATC	ATTTAAGGCT	TTTTTTTTCT	
7141	TGATTTTATA	TGTATGACAT	AAAAAAAATC	TTTGTAAAG1	CCCCTTCACC	AATAATTTAA	
	ACTAAAATAT	ACATACTGTA	TTTTTTTAG	AAACATTTCA	CGCGTTCACG	TTATTAAATT	
7201	AGAGGTCTTA	TCTTTGCATT	TATAAATTAT	AAATATTGTA	CATGTGTGTA	ATTTTTCATG	
	TCTCCAGAAT	AGAAACGTAA	ATATTTAATA	TTTATAACA1	GTACACACA	TAAAAAGTAC	
7261	TATTCATTTC	CAGTCTTTGT	AAAAAATTTA	ACTTTACTGT	TATGTTTGTA	TAATAGAACA	
	ATAAGTAAAC	GTCAGAAACA	TAAATTTTTT	TGAAATGACA	ATACAAACAT	ATTATCTTGT	
7321	TTAATCATTI	ATTATAACTO	AGACAAGGTG	TAAATAAATI	CATAATTCAA	ACAGCCAGTA	
	AATTAGTAAA	TAATATTGAG	TCTGTTCCAC	ATTTATTAA	GTATTAAGT	TGTCGGTCAT	
7381	TATATGCATA	TATGGGTGT	ACATTGCAAA	AATCTCTAT	TTTGTTCTAT	TCACATGCTT	
	ATATACGTAT	ATACCCACA	TGTAACGTTI	TTAGAGATA	AAACAAGATA	AGTGTACGAA	
7441	AAACAACTAZ	GAAATCTTTT	GTGGATATGT	AATTATACAT	TATAAAGTATA	A TATATATGTA	
	TTTCTTCATT	CTTTAGAAAA	A CACCTATACA	TTAATATGT	A TATTTCATA	r ATATATACAT	
7501		እ አጥለጥአጥጥጥ?	GAAATGTTCA	TAATTTTAA	GGATATTCT	r TGGTGTGAAT	
7501	TGATACATGA	4 WWIWTWTTT	CTTTACAAGT				



Title: Gene Necessary for Striatal Function... Inventor(s): Robertson, et al.

Application No.: 10/659,770 Docket No.: 2817/102

Page 37 of 37

7561